Applied Value Quarterly Steel Report

Q1 2022 Report Feb 2022

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Applied Value is a management consulting & investment firm with deep expertise in supporting clients throughout the steel industry.

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- Technical Savings
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- Manage Component Costs
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…across multiple industries from 10k-10M MT volumes

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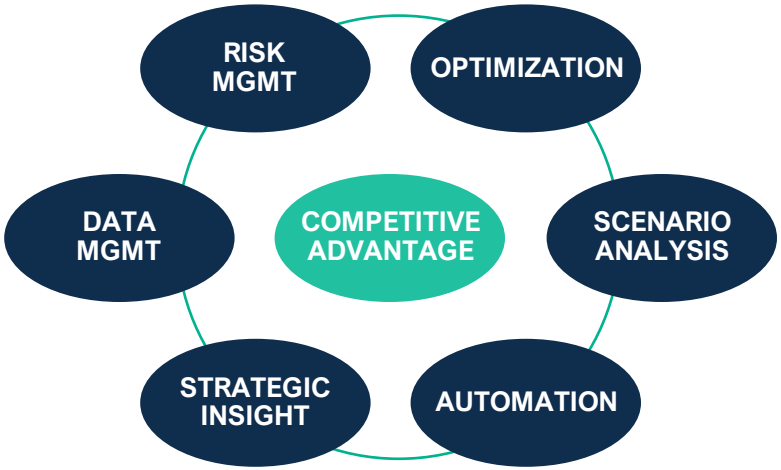
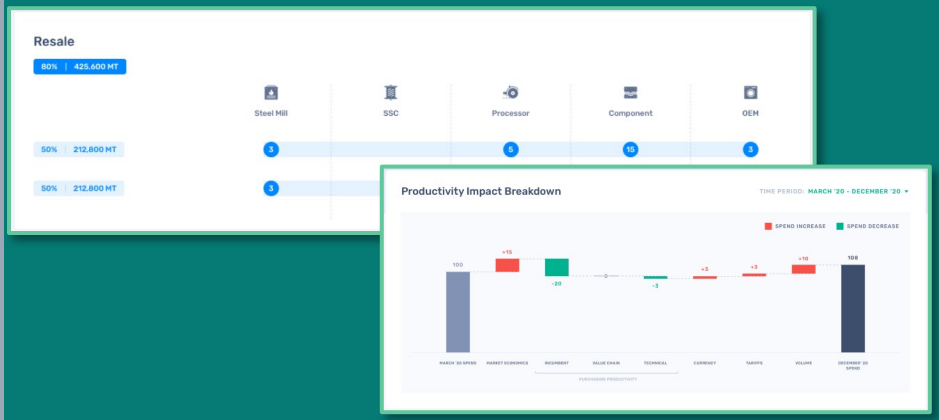
Sourcing Value is a comprehensive digital analytics platform for steel sourcing, designed by Applied Value to save buyers time & money.

SOURCING VALUE

Automate and **enhance** your steel sourcing process to save **time** and **money**



Highlighted Features



- ✓ Data Management
- ✓ Directed Buy & Resale Management
- ✓ Benchmarking
- ✓ Value Chain Optimization
- ✓ Executive Reporting & Dashboards
- ✓ RFQ Portal & Quote Analytics
- ✓ Fact-Based Negotiations
- ✓ Market Intelligence
- ✓ Day to Day Spend Management

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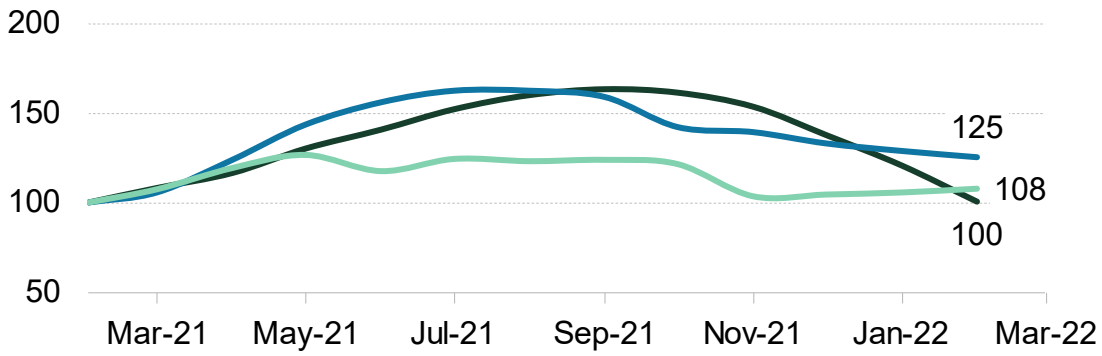
As US and EU prices trend downward, regional price spreads are beginning to fall.

Indexed Hot-rolled Coil Costs

Feb '21 – Feb '22 100 = February '21



Last 12 Months

HRC – US 0%

US HRC reported a Q-o-Q price decrease of 35% in Feb '22, bringing the indexed HRC prices down to Feb '21 level.

HRC- EU 25%

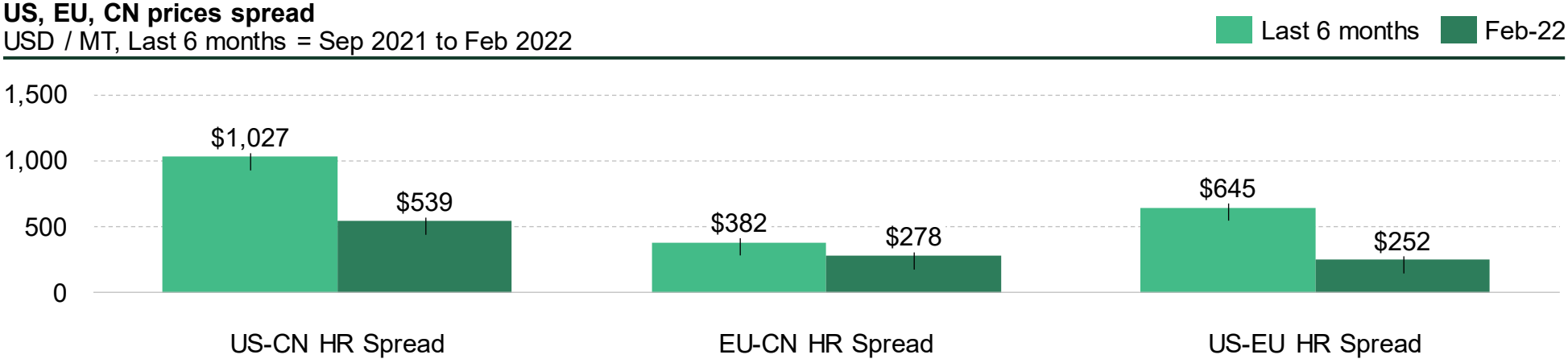
After reaching peak levels in August, EU HRC fell by 10% in Q4, bringing total LTM drop to 25%

HRC - CN 8%

After a brief plunge in November CN HRC has mostly stabilized, bringing total LTM change to +8%

US, EU, CN prices spread

USD / MT, Last 6 months = Sep 2021 to Feb 2022

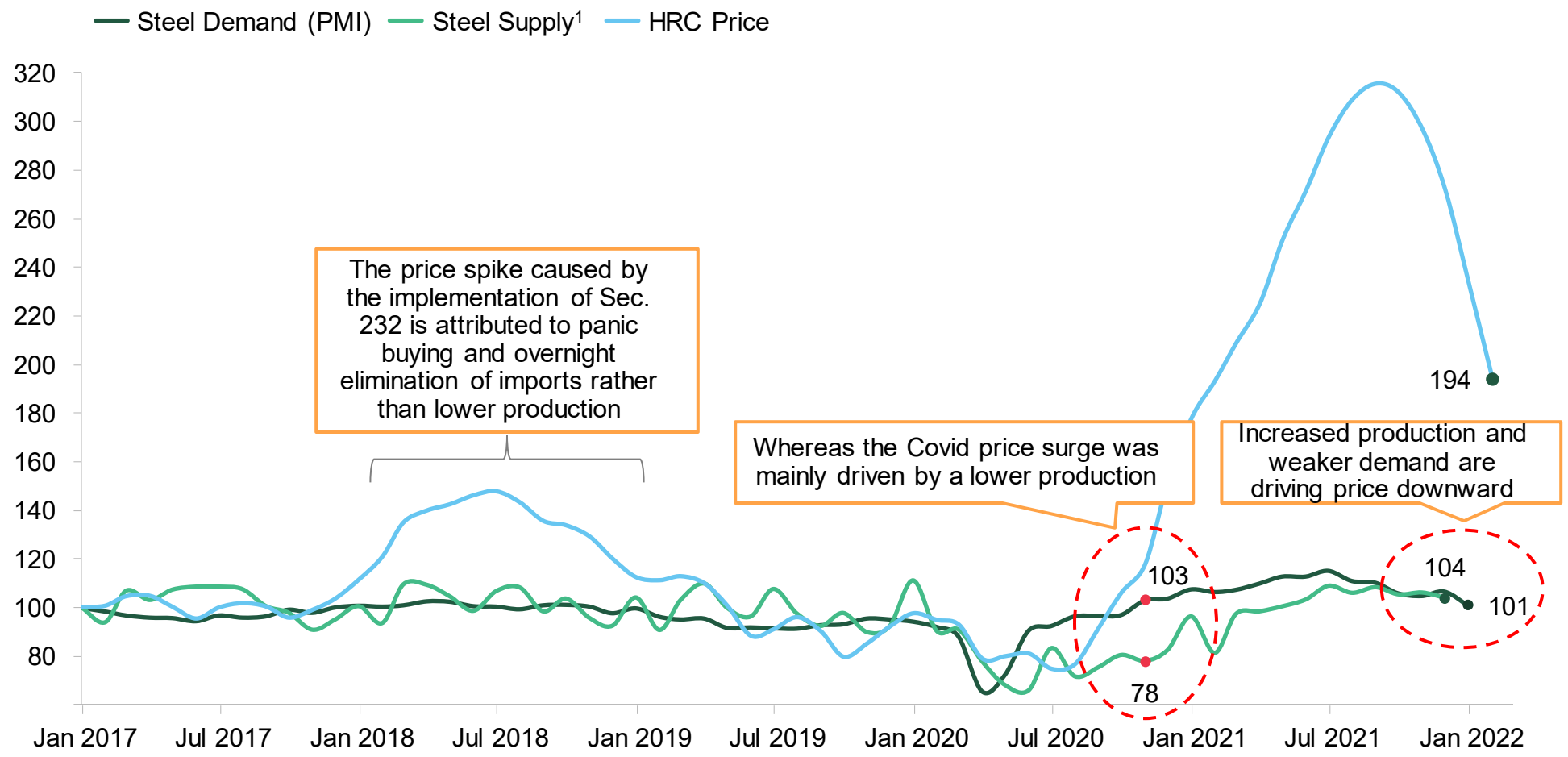


Source: AV Analysis

In the US and EU, the run-up in price can be closely linked to a supply/demand gap that occurred during COVID but is now closing.

HRC Prices vs. Supply & Demand Indicators, Indexed Q1 2017

100 = Q1 2017

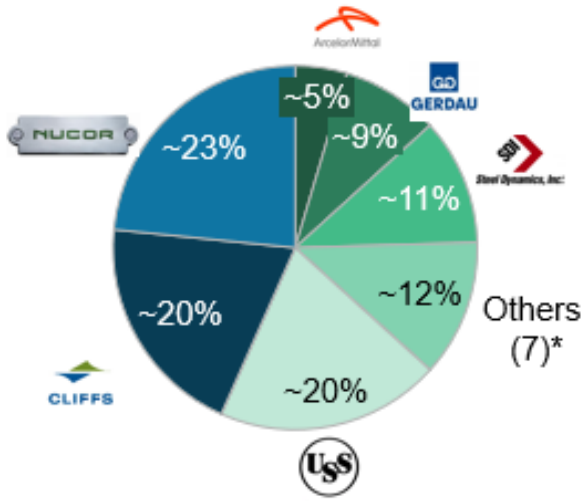


Note: 1. Steel supply is the sum of domestic production and import volume
Sources: Fastmarkets, World Steel, Statista, AV Analysis

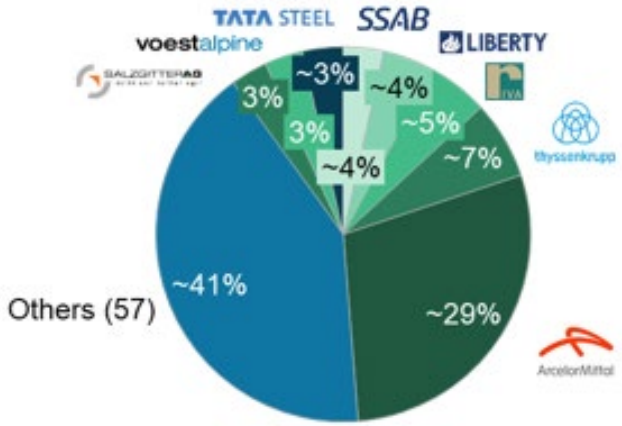
As Steel Makers in the US and EU plan to add 4.8mMT and 2.2mMT in 2022, respectively, supply outages are expected to be resolved.

Key Stats	US	EU
Suppliers Accounting for 90% of capacity	6	20+
2021 average utilization	81%	75%
EAF capacity	70%	39%
Net New Crude Steel Capacity In 2022	4.8mMT	2.2mMT
New Rolling Capacity in 2022	1.7mMT	1.3mMT

North American Mill Share of Capacity



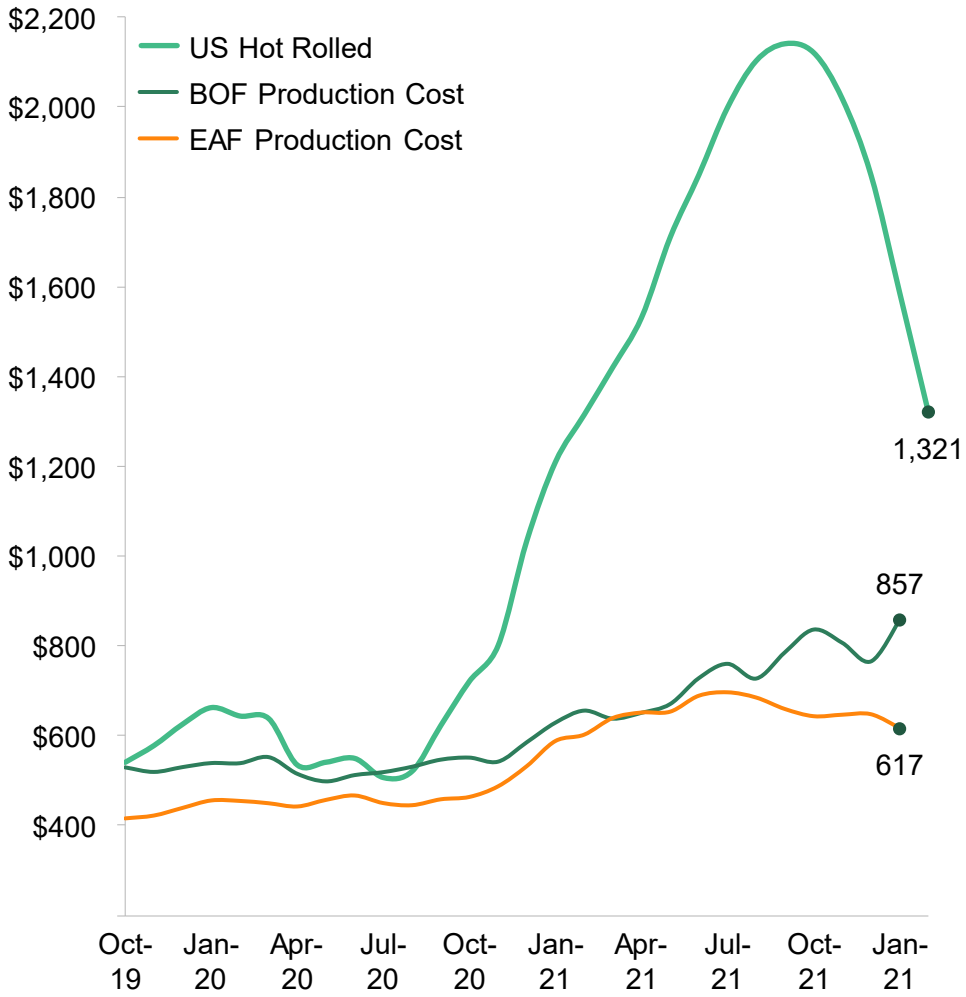
European Mill Share of Capacity



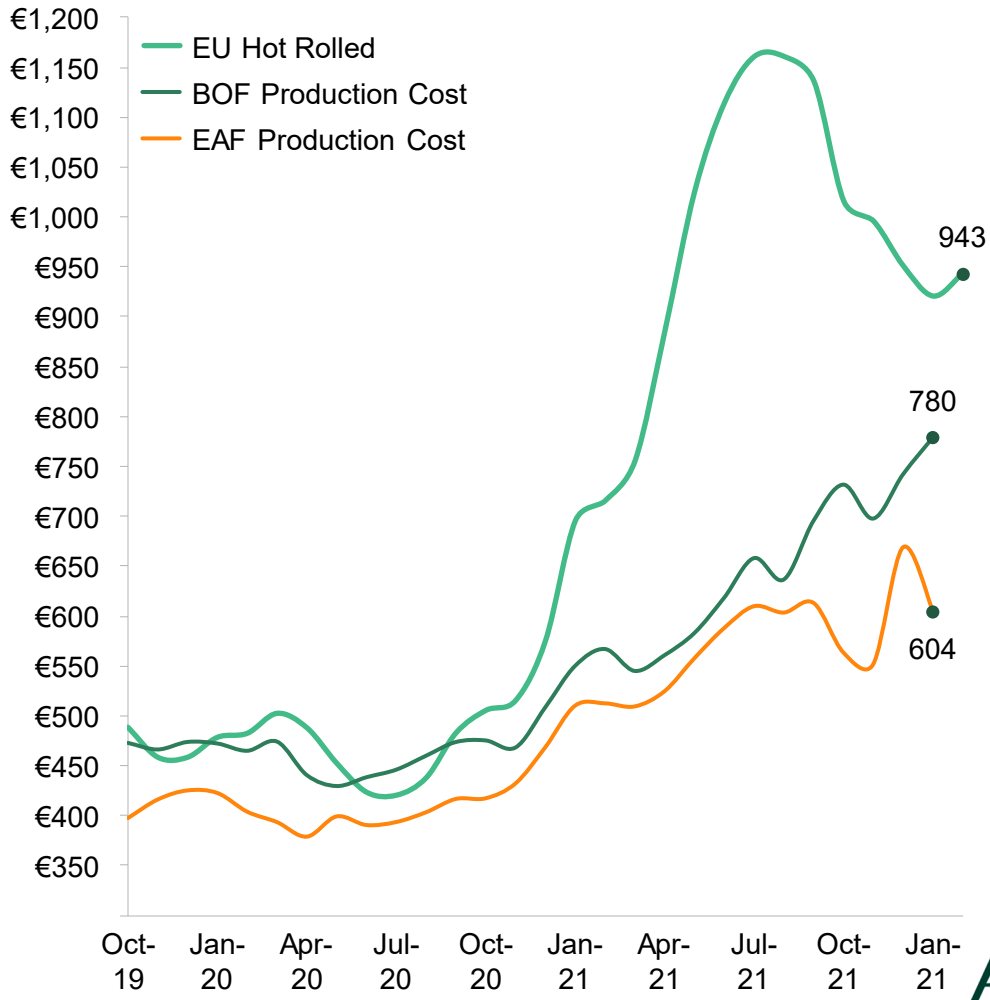
* Includes Nucor's plan to build a 3M ST mill set to start production in 2024

Although HRC prices have dropped significantly, spot market prices in US and EU remain higher than production costs.

US Production Cost vs. Market Pricing
Oct '19 – Jan '21, USD/MT

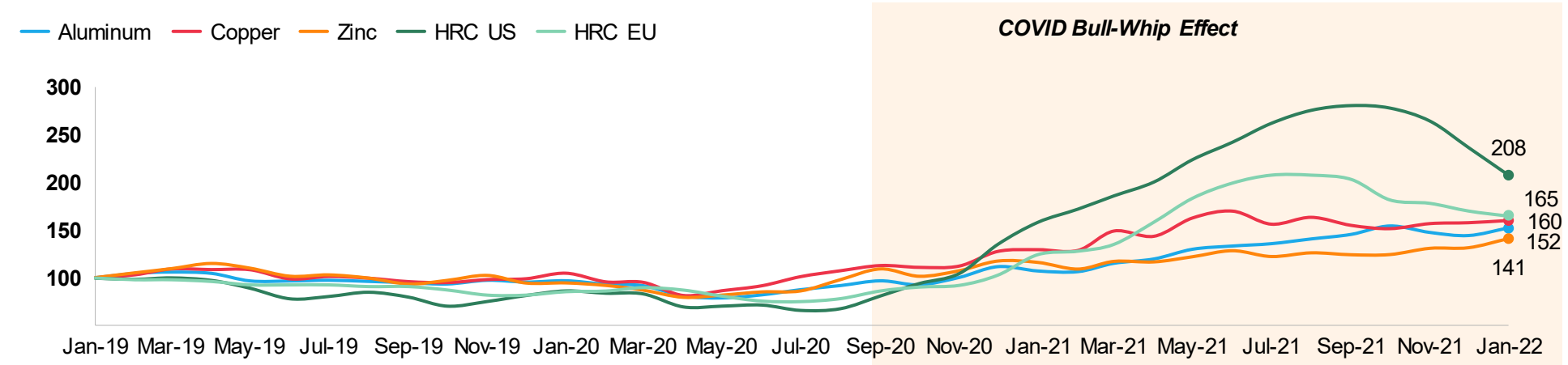


EU Production Cost vs. Market Pricing
Oct '19 – Jan '21, EUR/MT

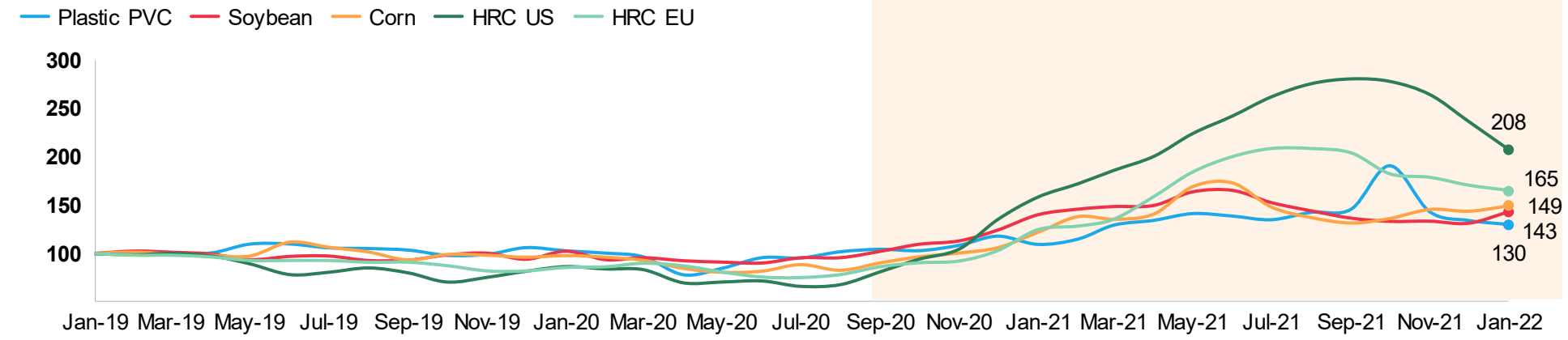


Relative to other global commodities, steel has been a unique outlier during the pandemic, despite HRC prices fell over last two months.

Non-precious Metal Price Indices



Other Non-metal Commodity Price Indices



Source: Applied Value, S&P CapitalIQ, Pieweb

Global HRC prices largely declined in Q4, driven by the continued rebound in global production, general steel availability and growth in international trade.

United States	Europe	China

Steel Price Trends & Forecasts

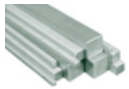
Q1'22 Forecast

United States	Europe	China
US HRC price fell by 35% Q-o-Q, ending a 1+ year run that saw US prices set all-time highs.	**EU HRC price fell by 5% Q-o-Q, driven by an increase in supply and stagnant purchasing activity.**	**CN HRC price fell by 13% in Q4 but has rebounded in 2022, increasing 3% over the past 3 months.**
Increased domestic production coupled with ~2x Y-o-Y growth in import volumes, largely driven by the pull-back of Section 232 tariffs, drove down US HRC price in Q4. Mill utilization > 80% continues to support strong end demand from the Auto, Construction sectors in 2022.	EU HRC production is expected to rebound to pre-pandemic levels in 2022 even as downstream demand remains unpredictable (i.e. Auto); EU HRC price has ticked up slightly in Q1, despite an 86% Y-o-Y increase in imports from APAC during Q4 and declining global raw material prices.	CN production is expected to remain constrained through March '22; healthy end-demand from Auto, Construction industries is expected to drive price to modest gains in early 2022; focus on environmental restrictions and increased M&A activity will also drive increases.

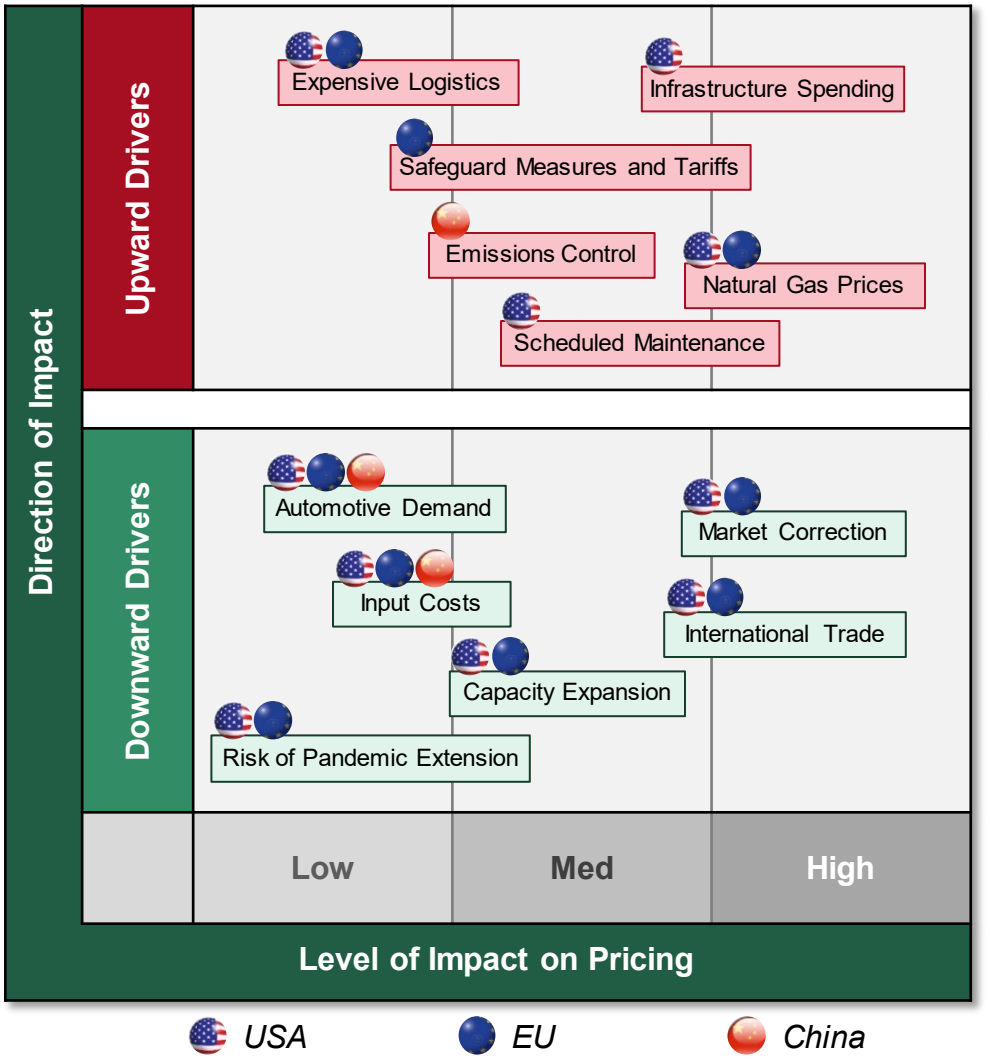
Raw Material Trends

After a brief period of price relief in Q4, raw material prices have started to rise once again; Iron Ore prices began to rise in Dec '21 after 5 months of decline driven by loosened CN monetary policy & new infrastructure spending.

Global Steel Price & Trend Summary.

Commodity		Latest Approx. Price*	Last 3 Months	Trend (3 Months Forward)
 ***Flat***	*US*	~$1321/MT	-35%	
	EU	~€943/MT	-5%	
	CN	~$782/MT	4%	
 ***SS***	*US*	~$4,519/MT	9%	
	EU	~$5,075/MT	5%	
	CN	~$2,812/MT	-14%	
 ***Plate***	*US*	~$2,001/MT	2%	
	EU	~$1,106/MT	1%	
	CN	~$784/MT	-11%	
 ***Bar***	*US*	~$1,488/MT	-3%	
	EU	~$957/MT	3%	
	CN	~$742/MT	-15%	

Major Market Drivers



* Flat prices updated to reflect most recent February '22 prices due to volatile market conditions; all other prices as of January '22.

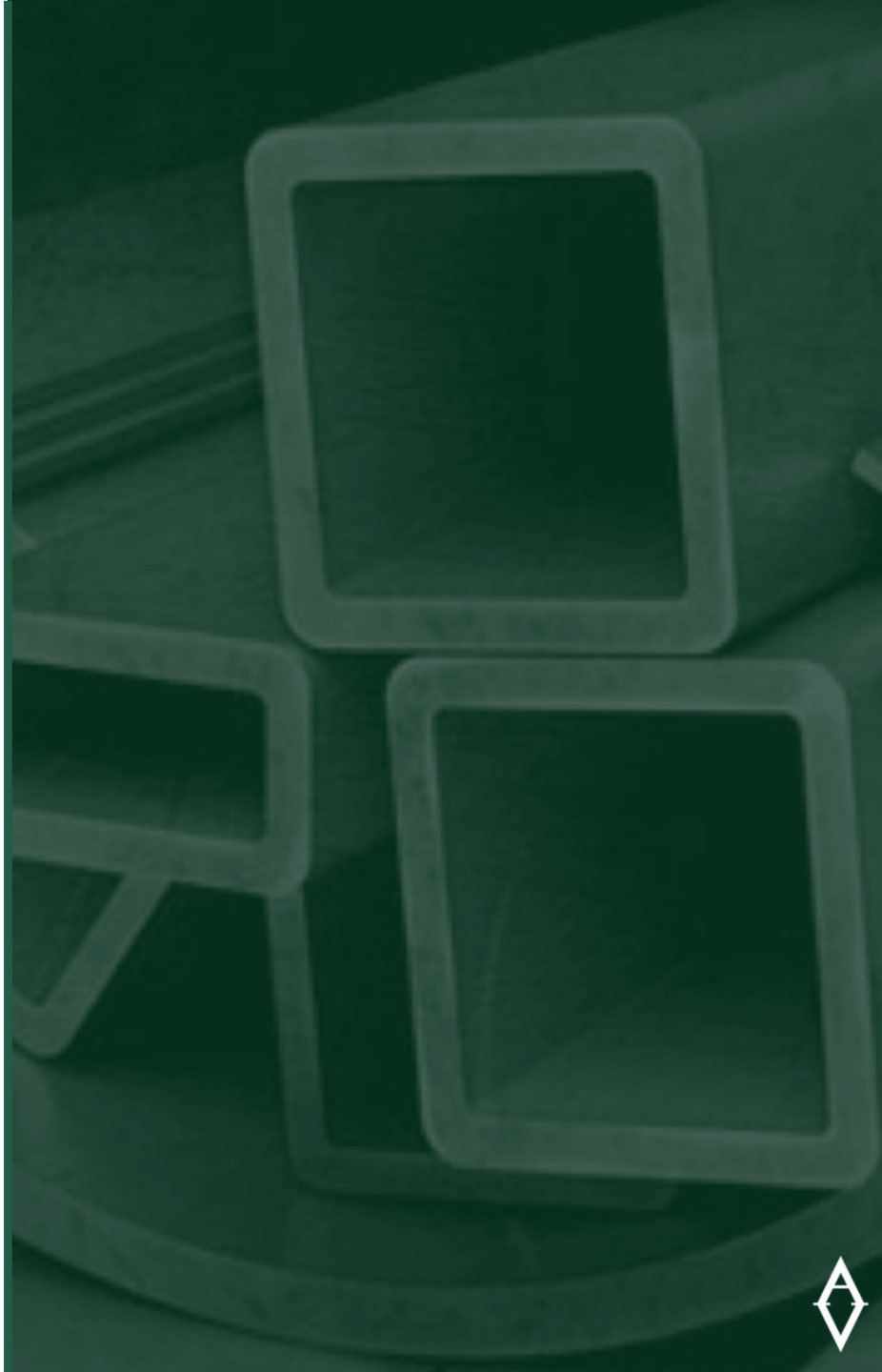
Applied Value Quarterly Steel Report

Q1 2022

Market Conditions by Region

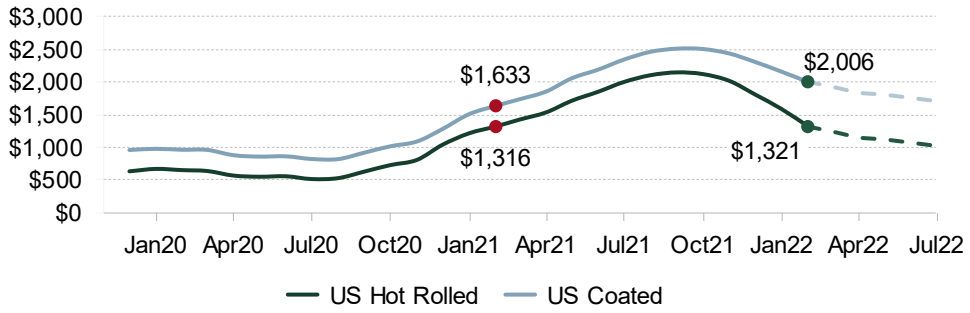
Steel Production Costs

Major Steel Mill Company Performance



After peaking at the beginning Q4 2021, US HRC finished down 35% Q-o-Q, at $1,321/MT in February'22m with shrinking lead times and weaker demand.

US Flat Prices (USD/MT)

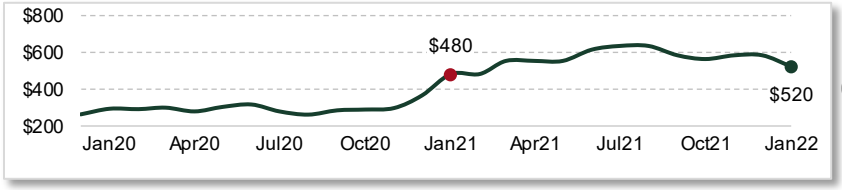


- US HRC stood at $1,321/MT in early Feb'22, down ~39% from its record high in Sep'21. In comparison, US Coated was slightly more stable, falling ~20% from its Sep. peak to $2,006/MT in Feb'22. Decreasing lead times between SSC and Steel Mills and weaker demand are also helping prices normalize, with a 5% decrease Q-o-Q in PMI in Jan'22. HRC prices are expected to continue to decline, with CR/Coated expected to follow suit, albeit with a delay.
- The combination of normalizing production volumes and a greater than 2x increase in import volumes Y-o-Y has helped ease tight domestic demand. These factors along with the replacement of Sec. 232 tariffs on EU steel imports with a quota, are driving expectations for lower prices across the market. However, a comeback by Auto could mitigate / threaten current price declines later this year.
- Scrap prices remained flat, closing at $520/MT in Jan '22. Both scrap processors and sellers were less profitable during the 1st buying period of 2022 evidenced by the downward trend of US scrap during January.
- US crude steel production volume stabilized at elevated levels in Q4'21. Steel supply is expected to continue to rise in 2022 as mill utilization rates remained above 80% in Q4'21.
- The US-CN HRC price spread narrowed to $539/MT in Feb '22 – down from $1,046/MT in Nov '21, as a result of the sharp decrease in US HRC prices.

Source: AV Analysis

US Scrap Steel Price

USD/MT



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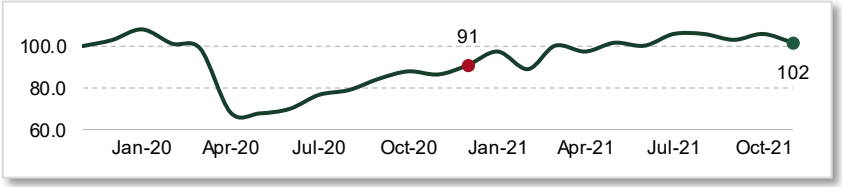
US Indexed Crude Steel Production Volume *100 = Oct 2019*



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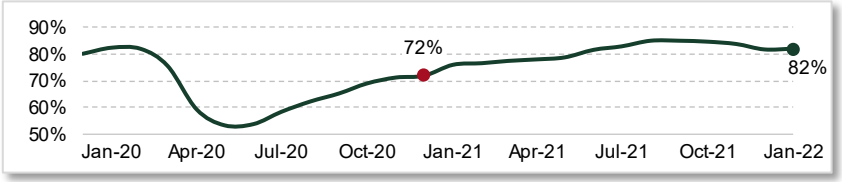
US Mill Capacity Utilization



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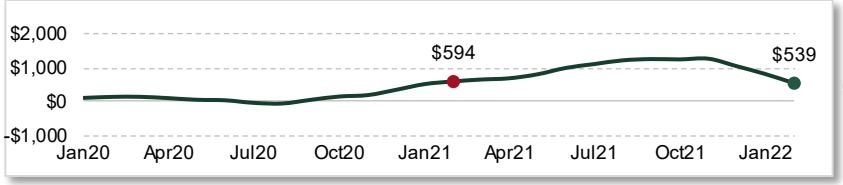
US vs China Price Spread

USD/MT



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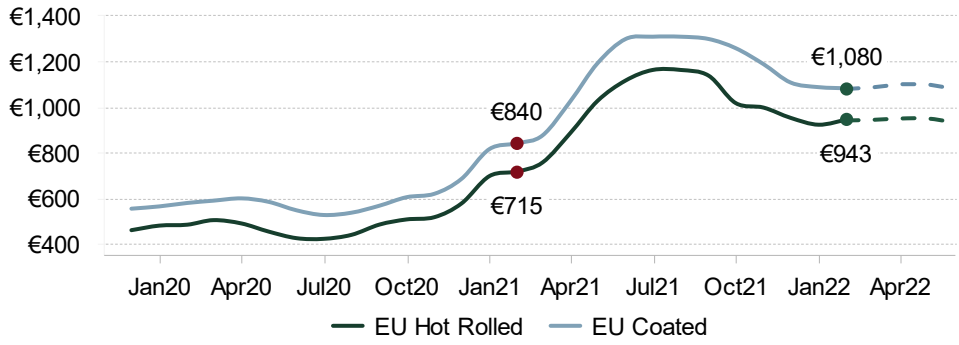
Previous Year's Data Latest Data + - Correlation to Market Price

EU HRC prices rebounded in Feb ’22 after five consecutive months of decline, driven by the recovery of automotive demand and rising input costs.

European Flat Prices (EUR/MT)

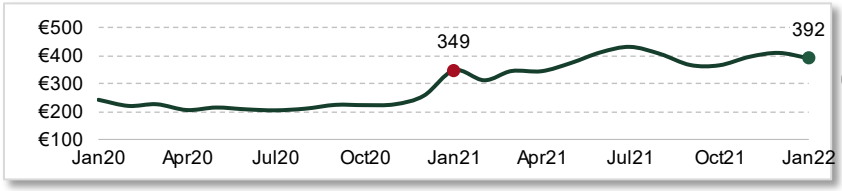


- After reaching multi-year highs in Q3’21, EU HRC and coated steel prices have steadily declined, dropping by 5% and 9% Q-o-Q to €943/MT and €1080/MT, respectively. The downward trajectories are being driven by higher production volume, stagnated purchasing, and fierce competition from APAC imports (excluding China).
- As a result of the climate target plans, steelmakers have been reducing their reliance on iron ore and are shifting demand to scrap as a key raw material. Scrap prices have risen 12% Y-o-Y to €392/MT in January ’22.
- EU crude steel production reached a five-month high in Q4’ 21, increasing 11% Q-o-Q. The largest EU steel supplier, Germany, produced over 3 MMT - representing 7% Y-o-Y increase.
- EU PMI has remained stable in Q4 ’21 and was up ~6% Y-o-Y, indicating improved manufacturing conditions as supply chain bottlenecks ease and factories stock up on raw materials at a record pace.
- The EU-China spread has narrowed by 28% Q-o-Q, closing at €247/MT in February ‘22.

Source: AV Analysis

European Scrap Prices

EUR/MT



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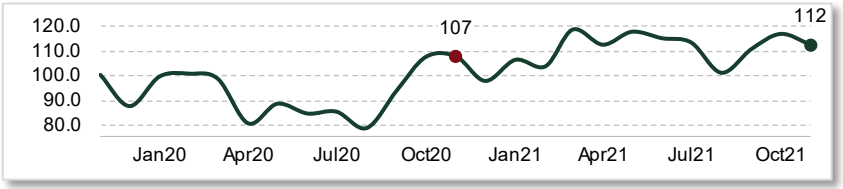
EU Indexed Crude Steel Production

100 = Nov 2019



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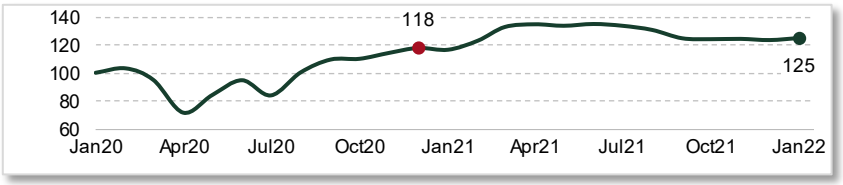
Euro Zone Manufacturing Indexed PMI

100 = Jan 2020



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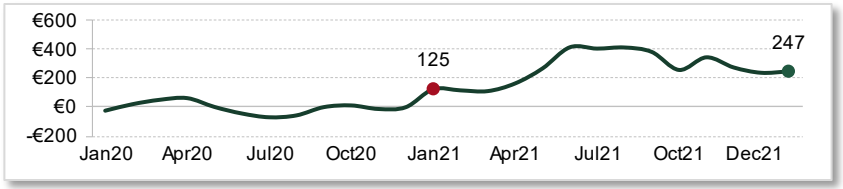
EU vs. China Price Spread

EUR/MT



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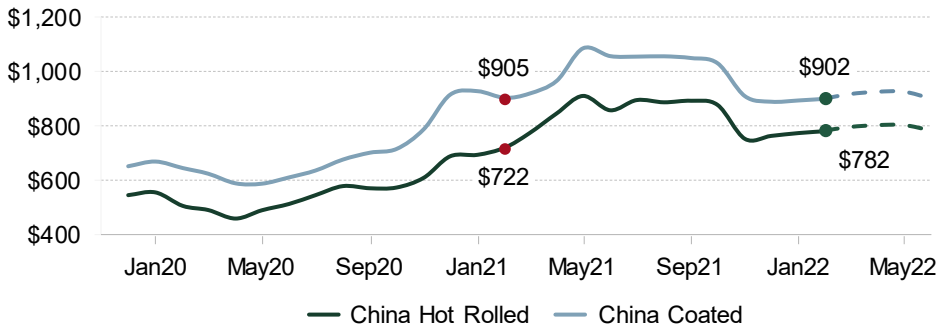
Previous Year’s Data Latest Data + - Correlation to Market Price

CN HRC and Coated prices showed signs of rebounding as demand recovered, closing at $782/MT and $902/MT in Feb ’22, respectively.

China Flat Prices (USD/MT)

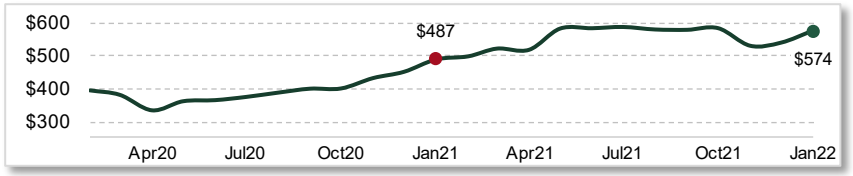


- China HRC and coated showed signs of a rebound after their Nov. plunge, rising to $782/MT and $902/MT in Feb ‘22. HRC prices are expected to steadily rise due to production constraints scheduled to remain in place until the end of Mar’22 and healthy construction activity. In addition, automakers are stocking up to resume production, spurring increased market confidence.
- Scrap price over the last two months showed signs of bouncing back after the Nov. drop of 9% M-o-M, settling at $574/MT in Jan ‘21. The increasingly tight scrap supply, due to production controls resulting from the Beijing Winter Olympics, is expected to continue to drive scrap prices up.
- Production volume began to rise in Dec ‘21 after dropping to a 6-month low in Nov ’21. Crude steel output is expected to rise in upcoming quarters as curbs on production are scheduled to end in Mar ‘22.
- China’s net exports continued to decline until Nov ’21 as Beijing limited overseas steel exports by cancelling the export tax rebate on CRC and HDG confidence in the domestic market also dampened mills' exporting interest during this time period. Dec ’21 began to show a slight uptick in exports.
- As US HRC prices declined significantly during Q4 ’21, US and EU price gaps shrank, and closed at $539/MT and $278/MT in Feb ‘22.

Source: AV Analysis

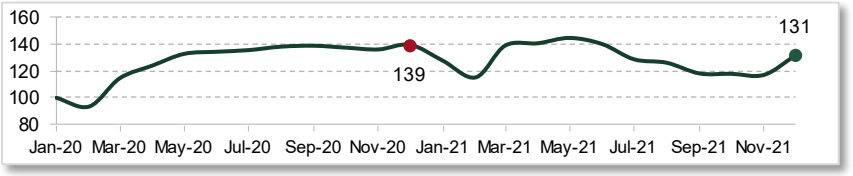
China Scrap Steel Price

USD/MT



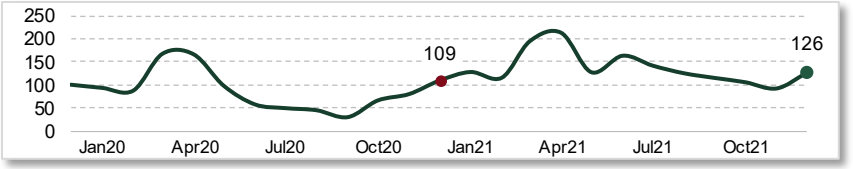
Indexed Production

100 = Dec 2019



Indexed China Net Exports

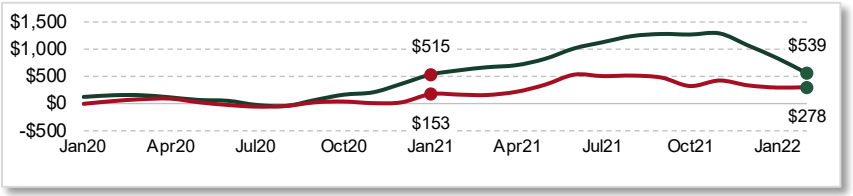
100 = Nov 2019



Spread between US & EU

US HR Spread — EU HR Spread

USD/MT



Previous Year’s Data Latest Data Correlation to Market Price

Expected upward market drivers for steel in 2022 include strong demand from key end-use industries, steelmaker M&A activity & environmental actions.

Upward Market Drivers

Automotive Recovery

- Global: Major automakers stocked up in preparation of production resumption in 2022 with expected easing of current supply chain pressure, that should boost demand for steel products and push global steel prices up. In parallel, Toyota has announced they aim to boost their US production, while Honda resumed its Japanese operations towards the end of 2021. Audi also announced that they will restart production in Brazil in mid-2022 in conjunction with their parent Volkswagen, which restarted Skoda Auto production lines in Oct '2021. Moreover, Tesla's reopening of its German-based production line is on schedule. In general, the automotive industry has signaled higher demand in 2022.

Construction Demand Recovered

- US: Biden's $1.2 trillion infrastructure bill has been passed. The bill aims to rebuild roads, bridges, and rails in the US which will increase steel purchasing for long products, boost market confidence, and drive-up steel prices. Plans to develop large-scale wind farms along the coastline were also announced by the Biden administration in October which has buoyed market sentiment for plate.
- CN: Despite weakened buying and investor sentiment on real estate, the announcement of the Central Bank cutting RRR by 50 bps to release $188 billion in stimulated construction demand will bring steel prices up. Additionally, the National People's Congress authorized an issuance of $350 billion to raise funds for 2022 infrastructure projects.

Environmental Standards Limit Steel Supply

- Global: World leaders reached a climate agreement at COP26, pushing countries to strengthen climate targets and restrict carbon emissions by moving away from fossil fuels. EU countries have encouraged steelmakers to use scrap instead of iron ore as a main raw material for steel production.
- US: The Biden administration is pushing for a revised $110 billion bill devoted to address climate change by building domestic clean energy supply chains and providing subsidies for existing industries like steel, cement and aluminum manufacturing.
- CN: Curbs on steel production were arguably the most important driver that halved iron ore prices and in turn pushed steel prices up. The future trajectory of the Chinese ferrous market in 2022 will depend on China's environmental actions, especially prior to and during the Beijing Winter Olympics.

Market Consolidation

- US: As demand for ferrous scrap has climbed in response to steelmakers' expanding production capacity, major US steel producers have integrated vertically by acquiring scrap processors to secure sufficient supply with stable prices. Acquisitions are expected to continue through 2022.
- CN: Many large Chinese steelmakers have been involved in M&A activities throughout 2021. Horizontal integration has enabled iron ore prices to drop and has lowered carbon emissions. These actions are aligned with Chinese government's decarbonization goals.

The post-pandemic market correction, eased domestic demand, and increased capacity have applied downward pressure on steel prices.

Downward Market Drivers

Market Correction

- US & EU: Joint effects of resumed production, newly-built domestic production capacity, and eased demand narrowed the gap between supply and demand, which brought US and EU HRC prices down from recorded peaks in Q3'21.

International Trade

- US: The relaxation of Section 232 together with increased shipping container availability has brought more opportunities for EU countries to export steel to the US market. With imports flooding the market, US steel prices have fallen & are expected to continue to fall with this extra overseas supply. The newly-agreed tariff-rate quota (TRQ) on EU steel will go into effect in Jan '22, allowing 3.3MMT of EU steel to import at zero tariff. Similarly, in Japan, negotiations for the removal of Section 232 on steel and aluminum products are underway, potentially dragging US steel prices down further.
- EU: EU import volume increased by 86% Y-o-Y during Q4'21 as Turkey, Russia, and the APAC region (excl. China and South Korea) continued to be the main import sources. EU will suspend its retaliatory duties imposed on US goods in response to the lift of Section 232 and has agreed to limit exports of steel and aluminum to the US.
- CN: China's net exports fell in Q4'21 in response to tightened emission controls for the Beijing Winter Olympics. The cancellation of the CRC and HDG export tax rebate has also cut the export volume down significantly, causing domestic steel prices to suffer due to additional supply.

Raw Material Prices Decline

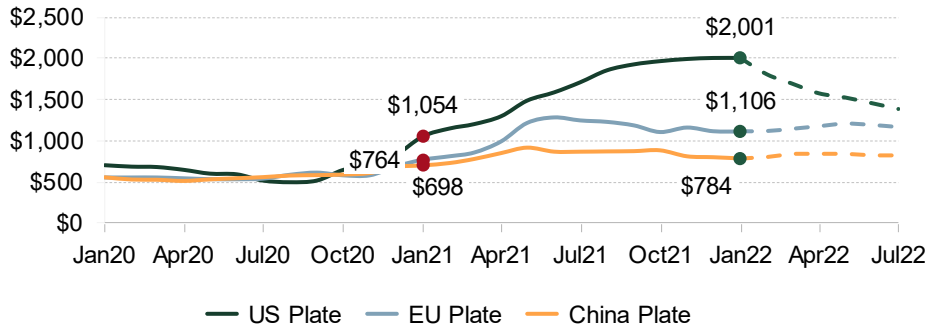
- Global: After months of skyrocketing pricing, global natural gas has showed a downward trend during Q4'21, primarily driven by exploration and production companies resuming operations & above-average temperatures in US. However, some key Russian pipelines have slowed output, creating uncertainty for EU gas prices. Coking coal prices came down from their October peak due to China's relaxed restrictions on coal mining amid a power crisis & increased supply from mines across the world. Iron ore prices fell by over 50% from a record high in Jun. '21 & have remained stable in Q4'21.

New Capacity

- US: US steel mill capacity utilization remained above it's 80% threshold throughout Q4'21. Steel supply is expected to rise in 2022 with increased output as a result of increased production capacity from new electric-arc furnaces as well as the restart of idled blast furnaces. As of 2022, a cumulative estimation of ~4.8MMT of EAF capacity will be released, with Steel Dynamics's Sinton plant accounting for 2.7 MMT.
- EU: The production level is expected to fully recover in 2022, coupled with ~2.2MMT of EAF capacity coming online.
- CN: Rizhao City in Shandong province, one of eastern China's key steelmaking hubs with a main iron ore port, is set to expand local crude steel capacity from 20MMT to 40MMT per year by 2025.

US plate price rose to a historical high of $2,001/MT in Jan ’22, however the EU and China plate price decreased by ~1% and ~11% Q-o-Q, respectively.

Plate Prices – US / Europe / China (USD/MT)

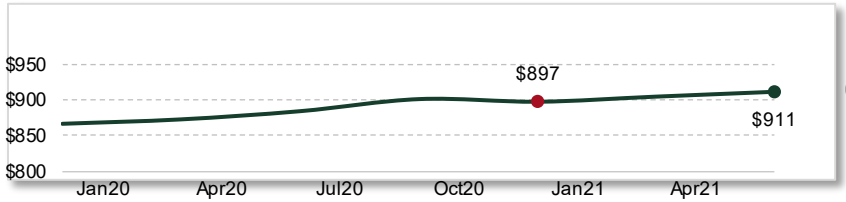


- US plate price reached record highs in Q4’21 and peaked at $2,001/MT in Jan ‘22. Pricing has remained at an all-time high since Nov ‘21, however, it is anticipated that plate price will soon follow the HRC price drop that occurred in late ‘21/early ‘22, with the price gap at historical highs & demand for plate not at strong enough levels to sustain current elevated pricing.
- EU plate pricing has remained relatively flat over the last five months. Data shows a 0.6% Q-o-Q increase in Jan ’22 to $1,106/MT, due to reduction in steel slab costs and general market uncertainties. Demand for plate is anticipated to strengthen, which may push prices down in the next quarter.
- China plate prices dropped by 11.3% Q-o-Q to $784/MT in January as a result of weakened export orders and prices. Plate prices are expected to rebound in the next quarter.
- The crude oil production gap between the US and OPEC increased steadily, with a 9.3% Y-o-Y increase for OPEC and 7.0% for the US.
- BDI fell to 1,892 in Jan ‘22 from 5,167 in September ‘21. Factors include a decline in China’s exports, increase in shipping capacity, port congestions and lower seasonal demand across all vessel segments.

Source: AV Analysis

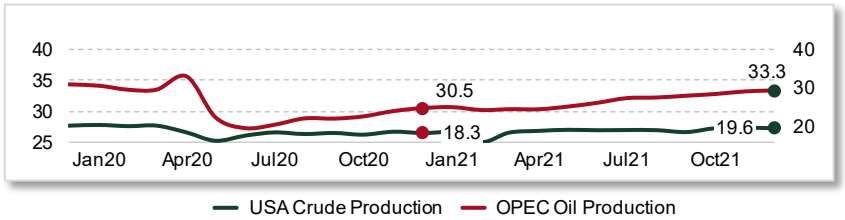
US Defense Spending

BUSD



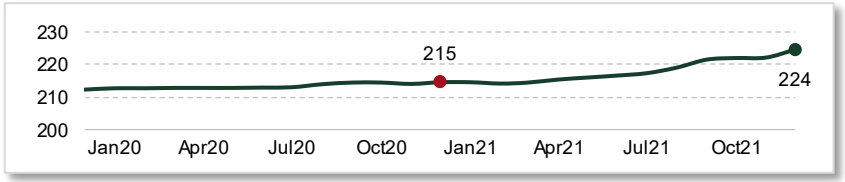
Crude Oil Production

MBPD

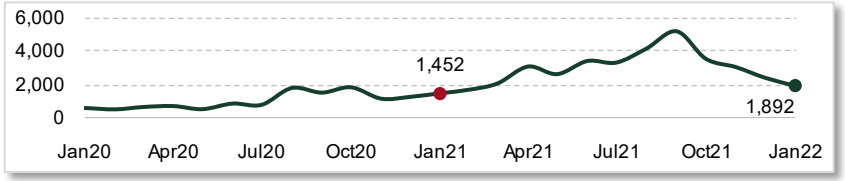


US Ship Building and Repairs

Index: 1985 = 100



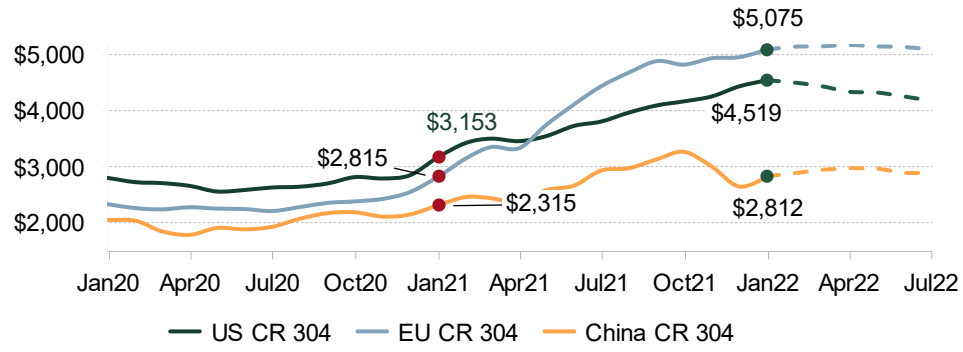
Baltic Dry Index



Previous Year’s Data Latest Data Correlation to Market Price

The worldwide economic recovery and pent-up demand led to an increase in global raw material prices, which resulted in a rise in stainless steel prices.

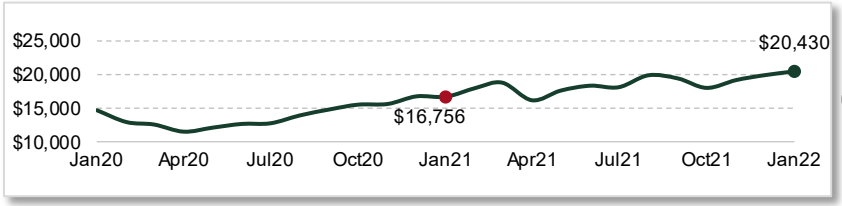
Stainless Steel Prices – US / Europe / China (USD/MT)



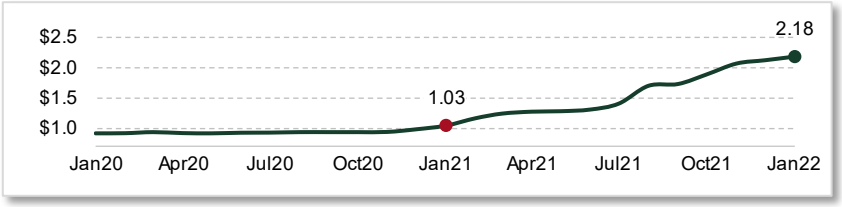
- US Stainless price rose by 9% Q-o-Q to $4,519/MT in January. Distributors and service centers increased their stock levels, but this elevated pricing may lead to a decline in stainless consumption in the coming months. As a result, suppliers may be likely to offer discounts to increase sales.
- EC safeguard quotas, nickel & ferrous scarcity, and high duties have led to consistently high stainless prices in the EU, reaching $5,075/MT in January. Relaxed Sec.232 may see EU steelmakers increasing US sales, resulting in reduced EU stainless supply.
- Asian grade 304 stainless prices hit their highest level in a decade, with China CR 304 priced at $3,260/MT in October '21. Chinese domestic mills are enforcing reduced melting activities as the government aims to reduce emissions. This, along with power rationing, curbed stainless production volume significantly, and Q-o-Q prices fell by ~14% to $2,812/MT in January.
- Global nickel prices rose gradually during Q4'21, with prices reaching $20,430/MT in January, representing a 13% increase Q-o-Q. Continued EU Nickel shortages contributed to this increase and are likely to persist in 2022.
- Demand for iron ore collapsed in Q4'21 - Chinese demand softened as a result of curbed steel production, with prices falling by 22% Q-o-Q. Iron ore prices rebounded in Dec '21 and Jan '22 to $126, on the heels of bullish sentiment.

Source: AV Analysis

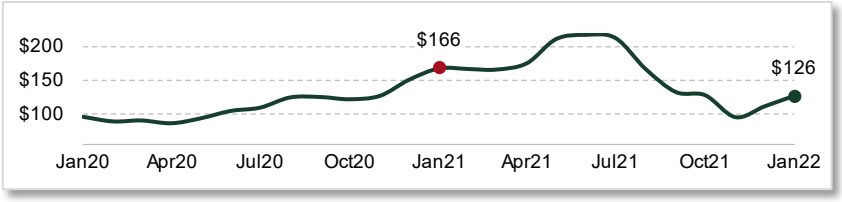
Nickel — USD/MT



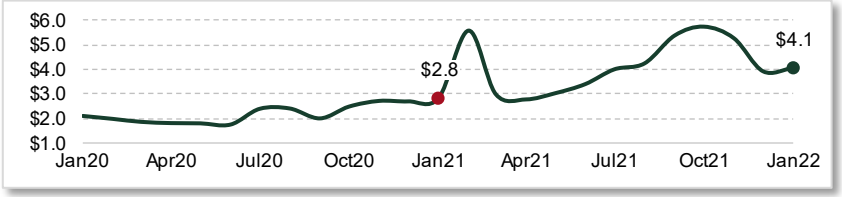
Chromium — USD/lb



Iron Ore — USD/MT



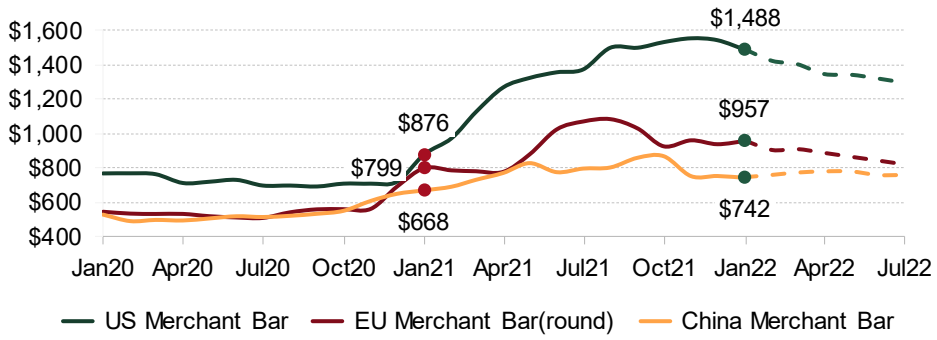
US Natural Gas — USD/mmBtu



Previous Year's Data Latest Data Correlation to Market Price

The China/EU merchant bar price gap continues to increase with EU prices rising by 3% Q-o-Q, while China merchant bar declined by 15% Q-o-Q.

Long Steel Prices (USD/MT)

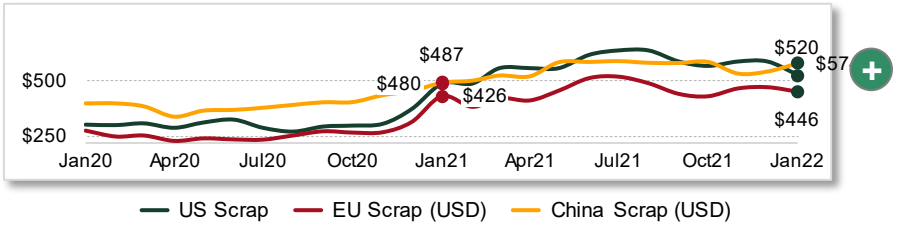


- US Merchant Bar prices fell by 3% Q-o-Q, reaching $1,488/MT in Jan '22 - representing a 79% Y-o-Y increase. The ongoing semiconductor shortages may constrain purchasing activities from the automotive, energy and transportation industries and thereby reduce steel demand.
- EU long steel saw an increase in price reaching $957/MT in January as a result of surging electricity costs. Low levels of automotive activity, high stock levels at the distributors, and reduction in component sales lowered overall demand, indicating long steel prices may drop in Q1'22.
- China long steel prices fell by 15% Q-o-Q in Q4'21. However, the effects of the Q4'21 issued special treasury bonds, along with the additional credit availability and upcoming transportation infrastructure construction will boost merchant bar demand and push prices upwards.
- Though Chinese steel scrap prices dropped by 9% in Nov '21, the Winter Olympics and curb on production increased long steel prices and thus, supported a rise in scrap prices to $574/MT in Jan '22.
- Ferrochrome price continued to rise in Q4'21 by 12.5% Q-o-Q and reached $8,433/MT in Jan '22, reflecting lowered production volume in South Africa due to a national lockdown.

Source: AV Analysis

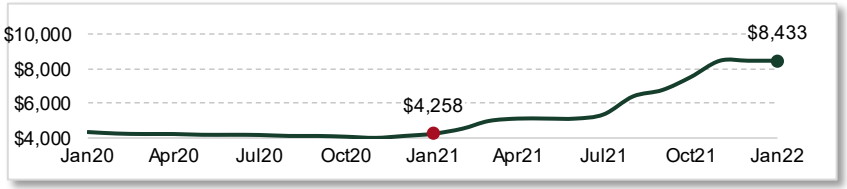
Scrap Steel Price

USD/MT



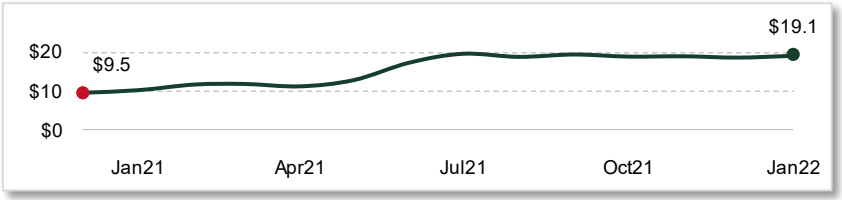
Ferrochrome

USD/MT



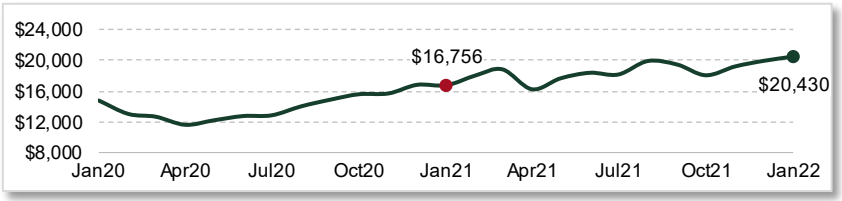
Molybdenum

USD/lb.



Nickel

USD/MT

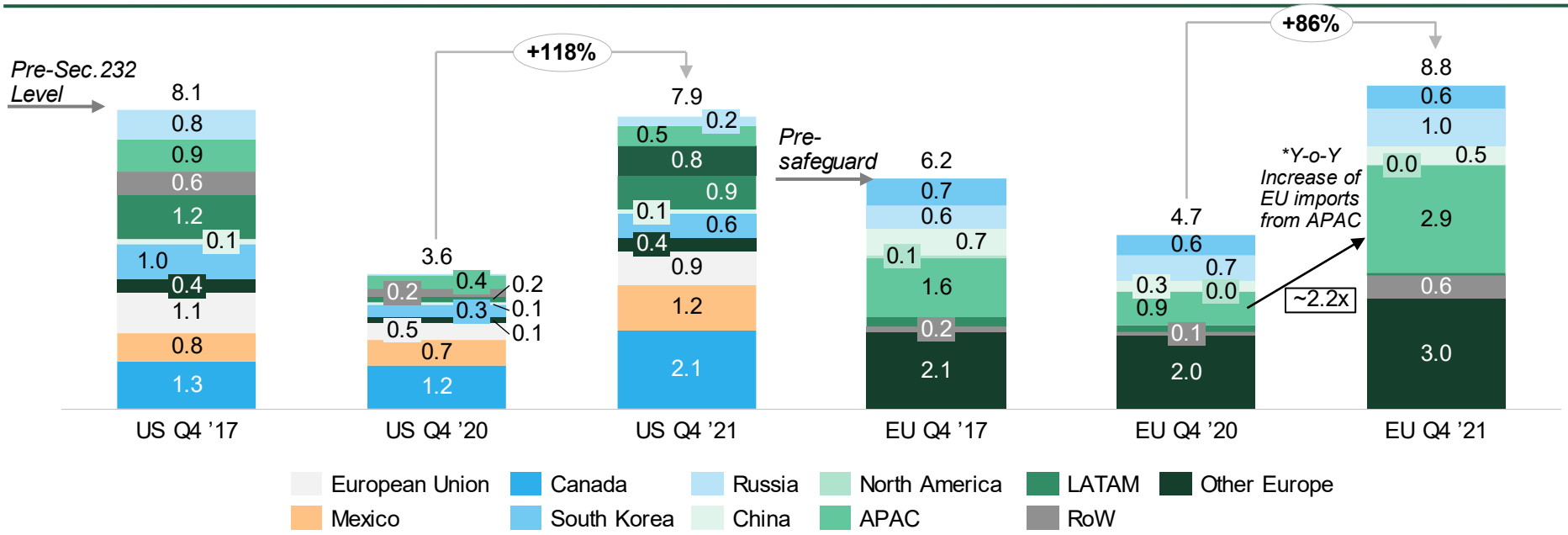


Previous Year's Data Latest Data Correlation to Market Price

US and EU imports increased significantly due to inflated regional price gaps and US replacement of Section 232 tariffs on EU with a quota.

US and EU Imports – All Steel Products MMT

Q4 2021: Aug 21 – Oct 21[1]

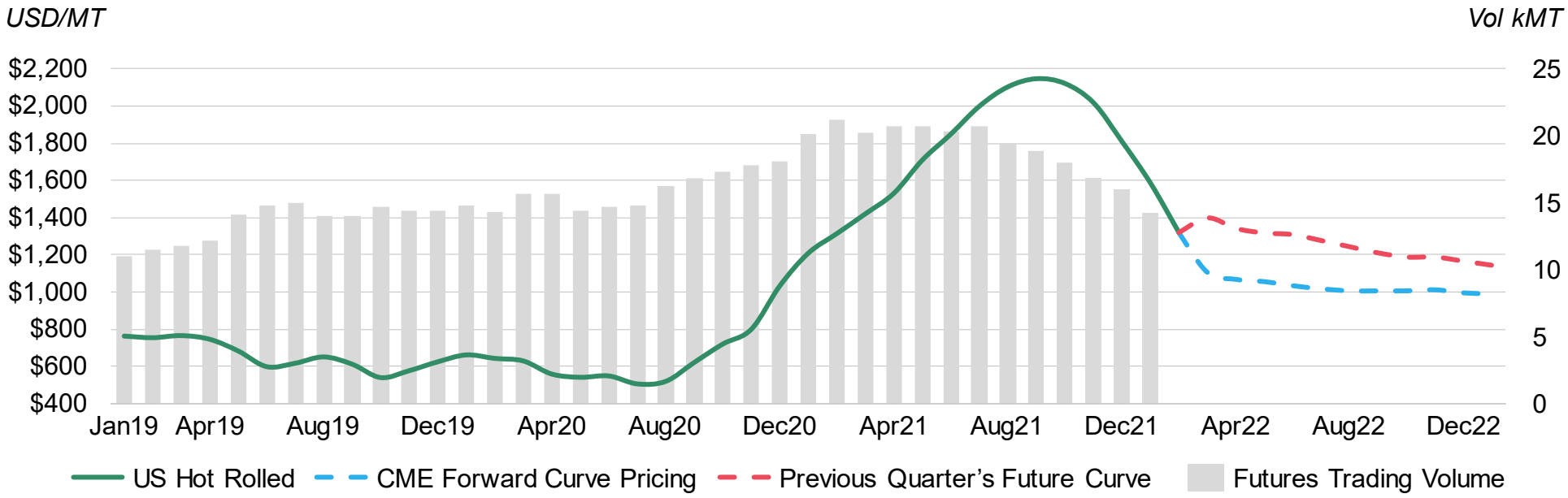


- Import volumes increased by 4.3 MMT and 118% Y-o-Y, almost reaching the pre-232 levels. Exempted by Section 232, Canada and Mexico continue to be the top 2 import sources, with volume increasing 0.9 and 0.5 MMT compared to same quarter last year. Imports from LATAM has seen significant growth of 495%, ~0.7 MMT.
- EU total import volume has increased 4.1 MMT and ~86% Y-o-Y, surpassing pre-safeguard levels. Imports from APAC marked the biggest jump of over 200%, mainly driven by increasing import volume of Vietnamese coated steel and Indian flat steel.
- In Nov' 21, US announced to remove the Section 232 tariff on EU steel, up to past trade volume levels (3.3 MMT / year), effective on Jan '22. The EU, in turn, has taken steps to suspend its rebalancing measures against the United States.
- With shrinking price gaps between key global regions for most steel commodities, US imports are expected to peak in the coming months – although increased import activity is expected in the short-term for commodities like CR & coated flat steel, where price gaps have remained elevated

Note 1: There is a one-quarter lag on the publication of import data

US HRC futures curve is trending lower this quarter, indicating continued bearish market sentiment, with futures trading at an average of ~$1,000/MT.

Hot Rolled Historical Prices, Contract Volume, and Futures CME Pricing



- As production remains at elevated levels, in conjunction with soaring import volume & lower cumulative demand, the CME futures curve this quarter is trending lower than Q4, indicating that the market is anticipating a continuation of the current downward trend and overall bearish outlook for HRC, with supply outages now mostly resolved. HRC futures for Jan '23 are trading 25% lower than current spot market prices.
- HRC futures are trading at a lower volume than last quarter, with volumes down by 21% Q-o-Q in Jan '22, indicating that market-perceived volatility has declined. Traders are holding back from making deals, and hedging activity is entering a wait-and-see period.

Note: Volumes are traded volumes cleared by CME, i.e. they exclude the "off exchange" OTC (over-the-counter) volumes not cleared by CME Prices

Source: CME, AV Analysis

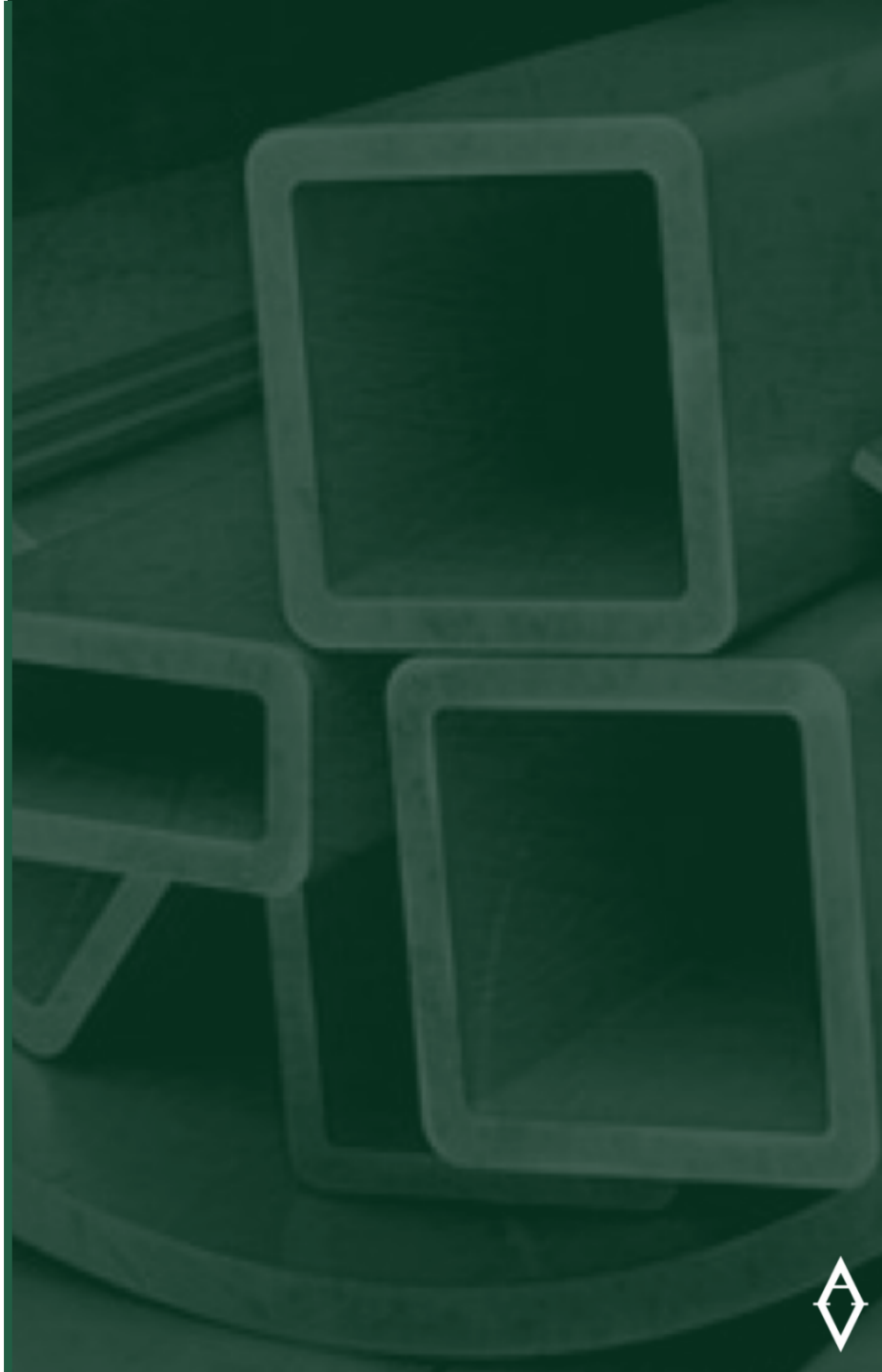
Applied Value Quarterly Steel Report

Q1 2022

Market Conditions by Region

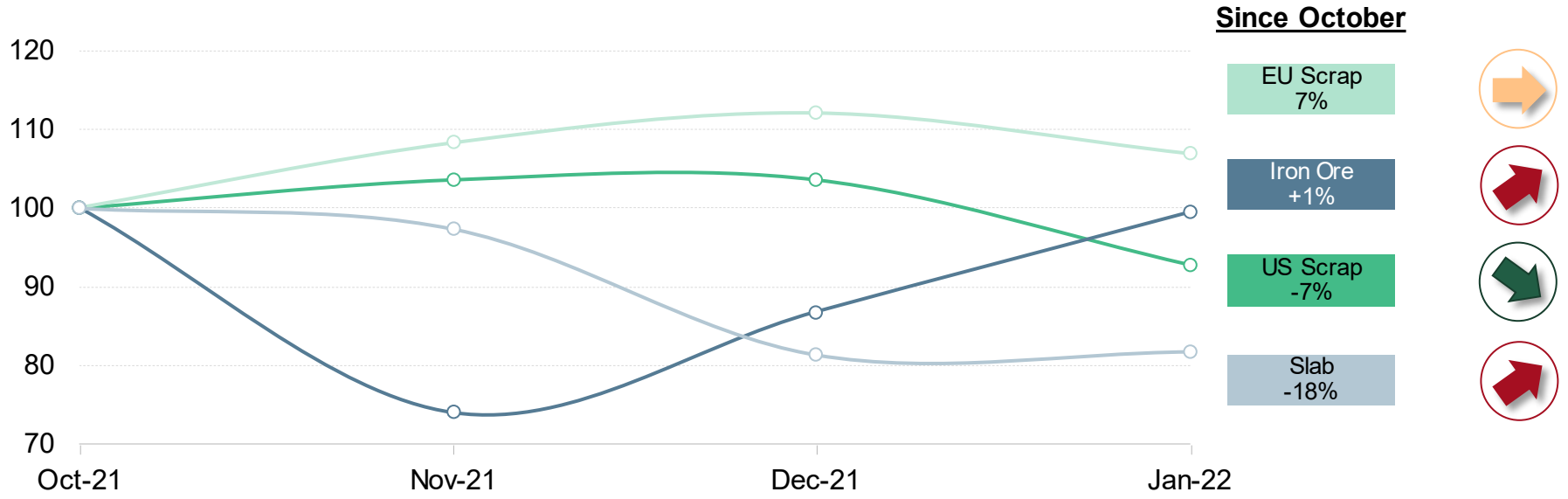
Steel Production Costs

Major Steel Mill Company Performance



US slab started to fall in Dec ’21 while scrap fell in Jan ’22; Iron Ore prices started to recover in Dec and reached to its Oct ’21 levels in Jan ‘22.

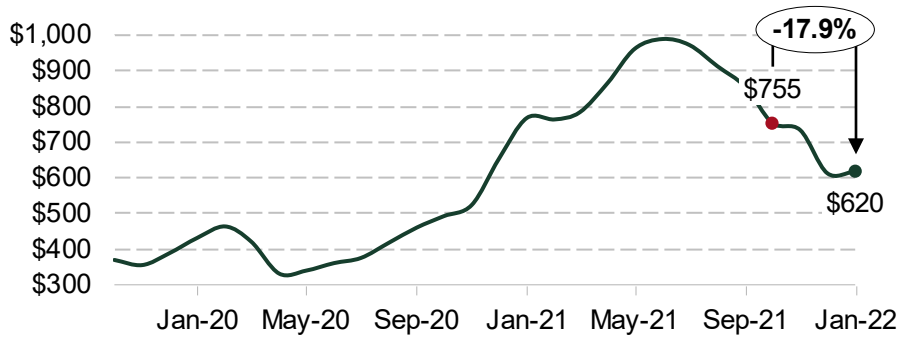
Current Market Update **Q1’22 Forecast**



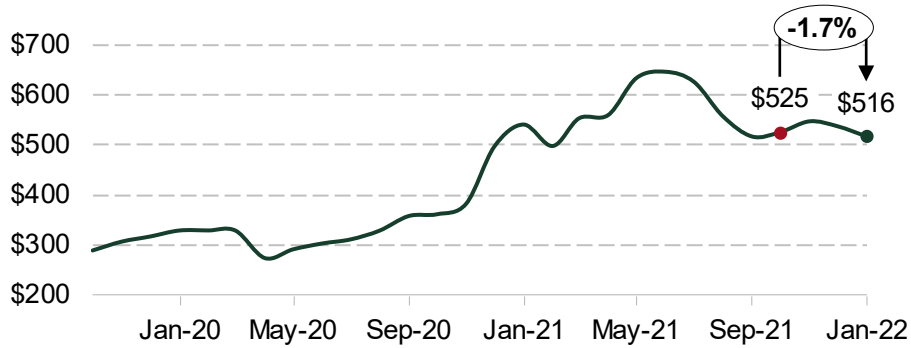
US Scrap	EU Scrap	Iron Ore	Slab
› Weakened demand for US scrap in Jan ’22 drove price down by 7% Q-o-Q. US scrap pricing is expected to decline further over the next quarter.	› Under the new waste shipment regulation, bans have been implemented on scrap exports. Prices may stabilize for the foreseeable future as EU steelmakers have the ability to absorb excess domestic supply by using production capacity.	› China’s monetary easing, “Green” targets, and healthy infrastructure spending have boosted iron ore prices. The momentum is expected to endure over the next quarter, with iron ore prices steadily increasing globally.	› Slab prices showed a small jump in Jan. and Feb ’22 - this upward trend is expected to continue while supply is still limited & demand continues to recover for semi-finished steel products.

Slab prices declined remarkably by ~18% Q-o-Q in Jan'22; Ferrous scrap in Europe increased by 8.4% Q-o-Q, whereas US was down by 0.9% Q-o-Q.

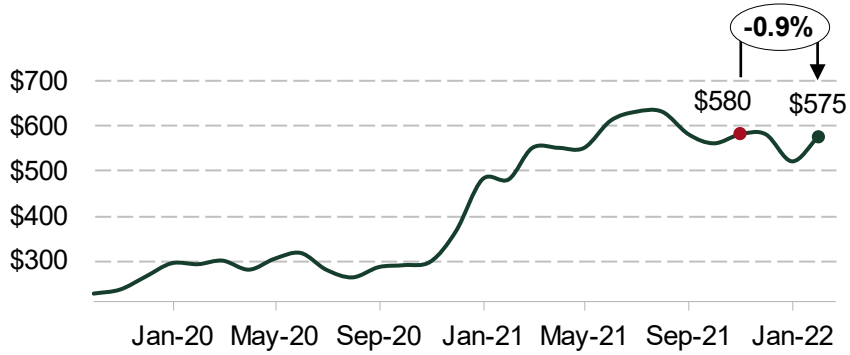
Slab
USD/MT Oct 19 – Jan. 22



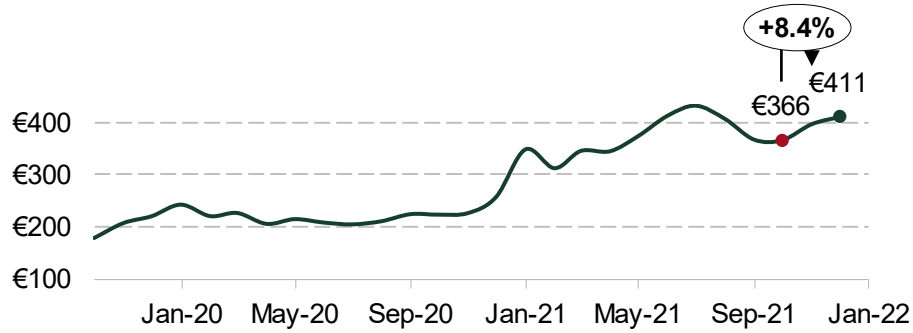
Pig Iron
USD/MT, Oct 19 – Jan. 22



Ferrous Scrap US
USD/GT Oct 19 – Feb. 22



Ferrous Scrap Europe
EUR/MT Oct 19 – Dec. 21

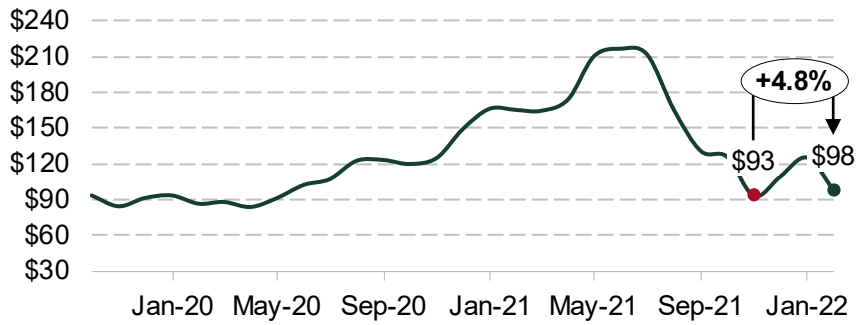


Previous Quarter's Data
Latest Data

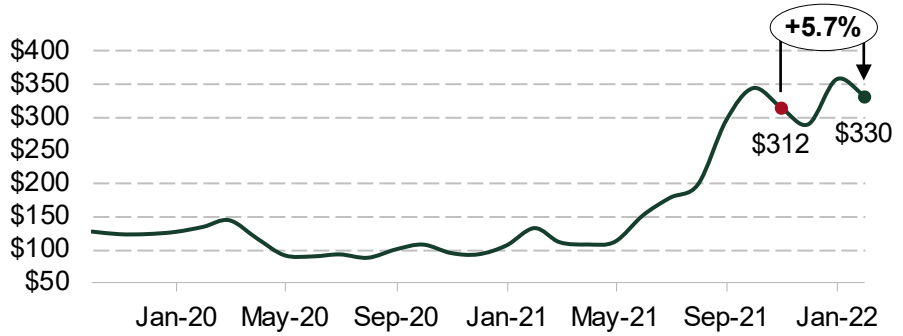
Source: AV Analysis

Iron ore and coking coal prices increased by 5% and 6% respectively, while Zinc and limestone remained relatively flat.

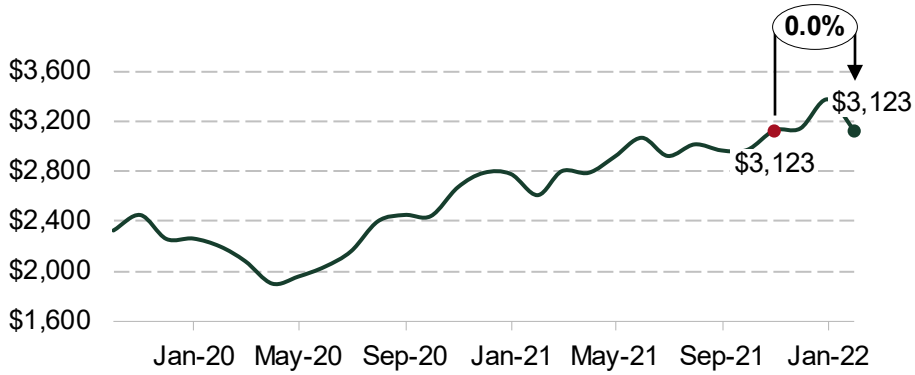
Iron Ore
USD/MT Oct 19 – Feb. 22



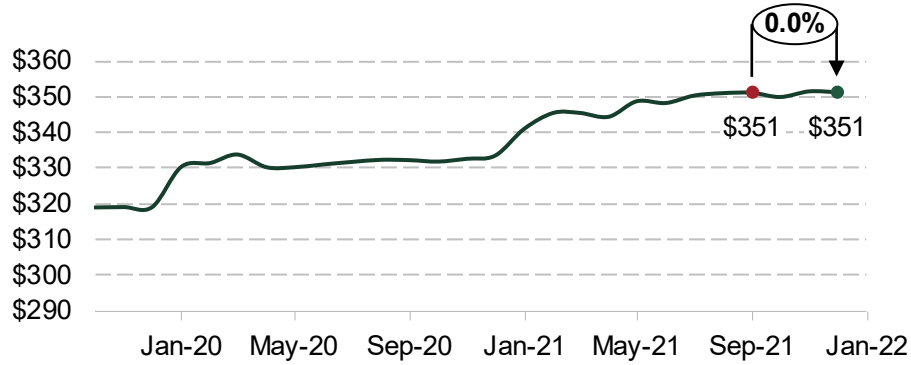
Coking Coal
USD/MT Oct 19 – Feb. 22



Zinc
USD/MT Oct 19 – Feb. 22



Limestone – Producer Price Index
Oct 19 – Dec. 21

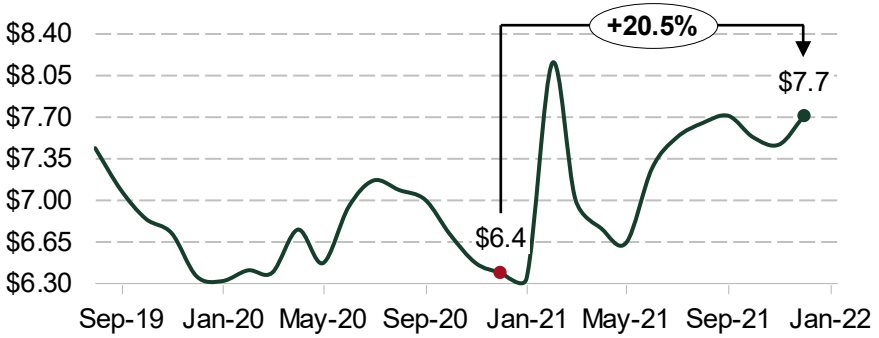


Previous Quarter's Data
Latest Data

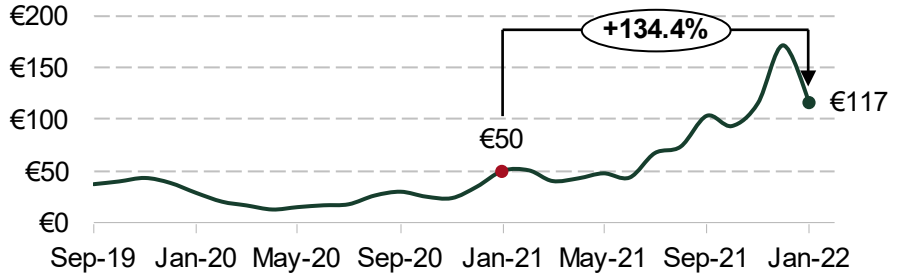
Source: AV Analysis

European electricity prices spiked at €174/MWh in Dec'21, followed by a dip in Jan'22; Germany natural gas prices increased by 562% Y-o-Y through Nov '21.

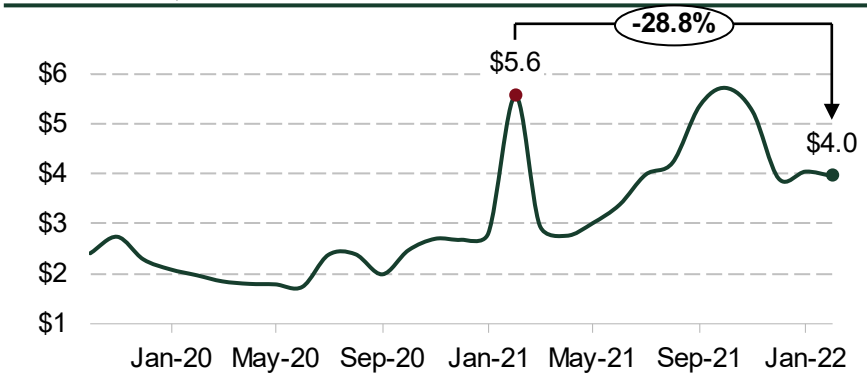
Electricity US
US cents/KWH, Oct 19 – Dec. 21



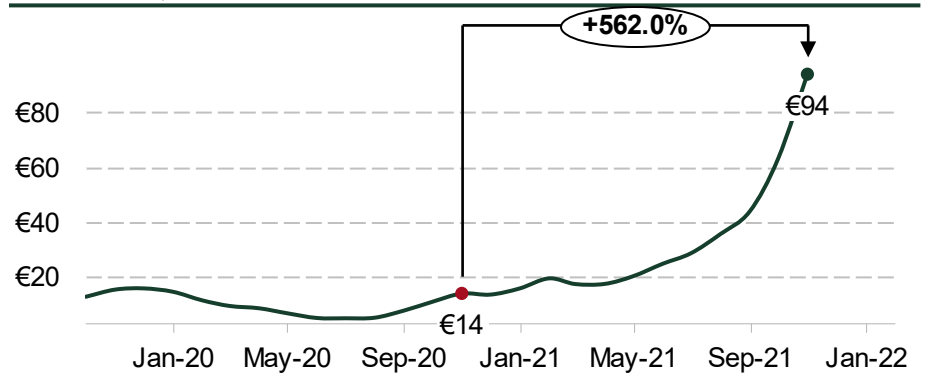
Electricity Europe
EUR/MWH, Sep 19 – Jan. 22



Natural Gas US
USD/mmBtu, Oct 19 – Jan. 22



Natural Gas Germany
EUR/MWH, Oct 19 – Nov. 21



Previous Year's Data
Latest Data

Source: AV Analysis

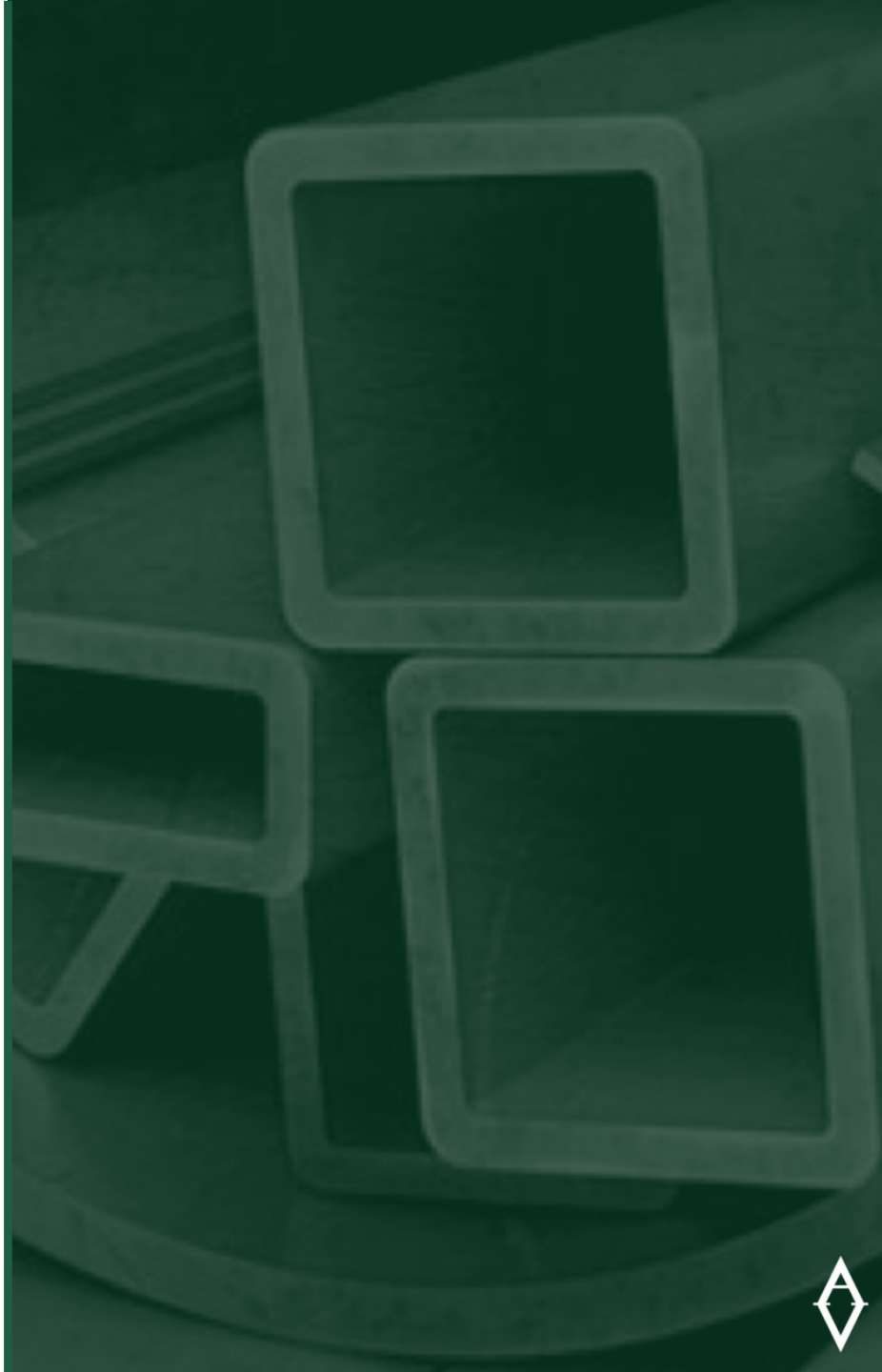
Applied Value Quarterly Steel Report

Q1 2022

Market Conditions by Region

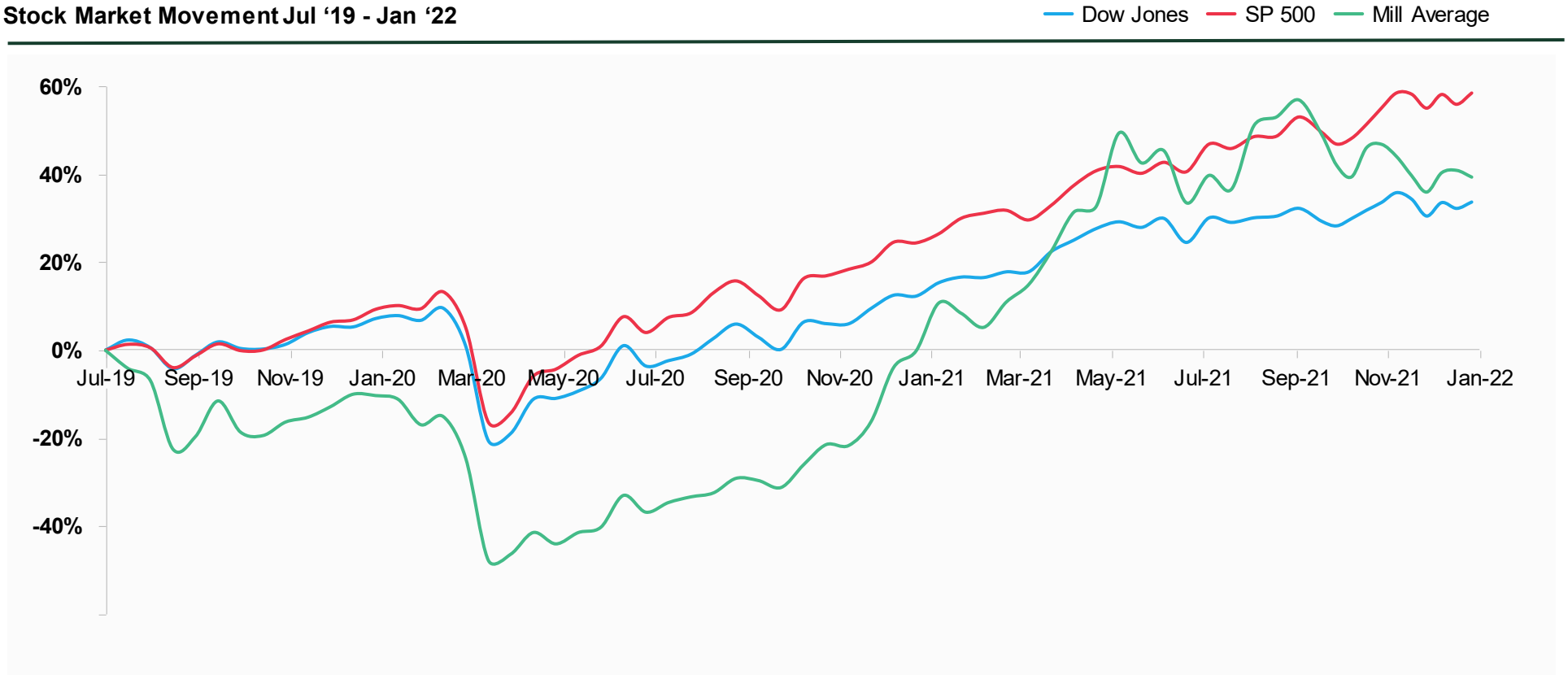
Steel Production Costs

Major Steel Mill Company Performance



Selected steel mills outperformed the market during the first three quarters of 2021, as a result of record-breaking profits.

Stock Market Movement Jul '19 - Jan '22

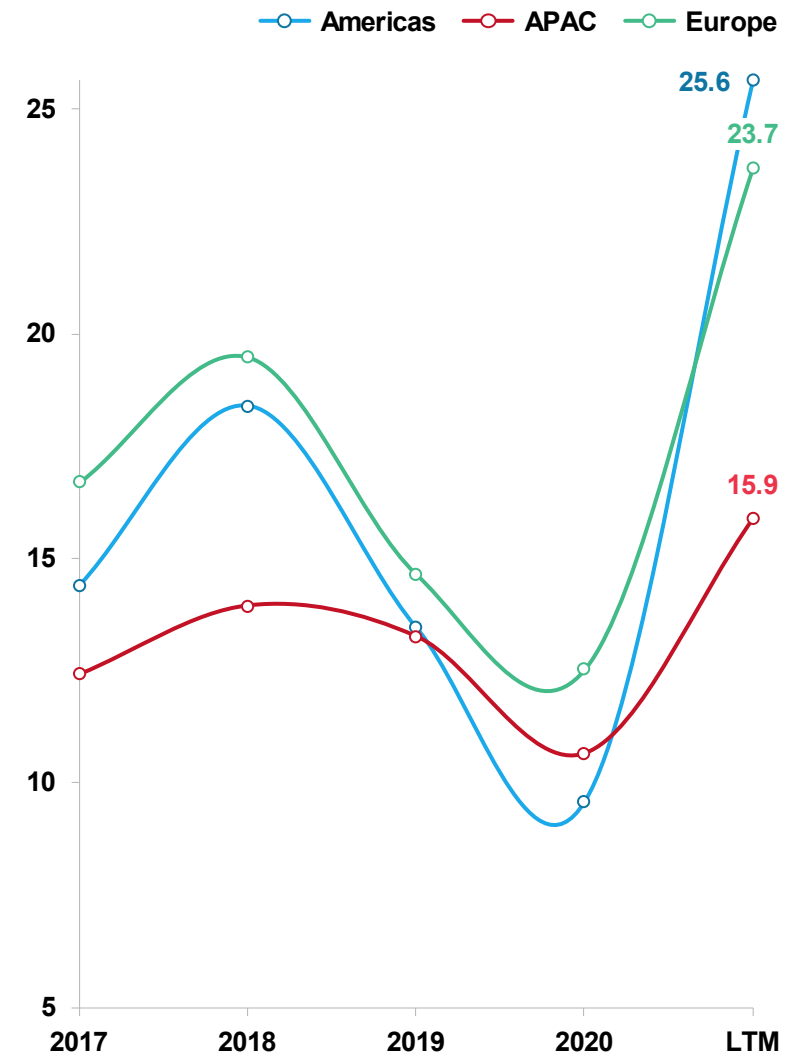


Top Performers:	TATA STEEL	122.2%	NUCOR	104.1%	CLIFFS	86.3%
Bottom Performers:	ThyssenKrupp	-27.1%	HBIS GROUP 河钢集团 HBIS GROUP	-18.1%	EVRAZ	-10.5%

EBITDA margins of large global steel mills have increased significantly in the last year due to economic recovery; tight supply led to higher steel prices.

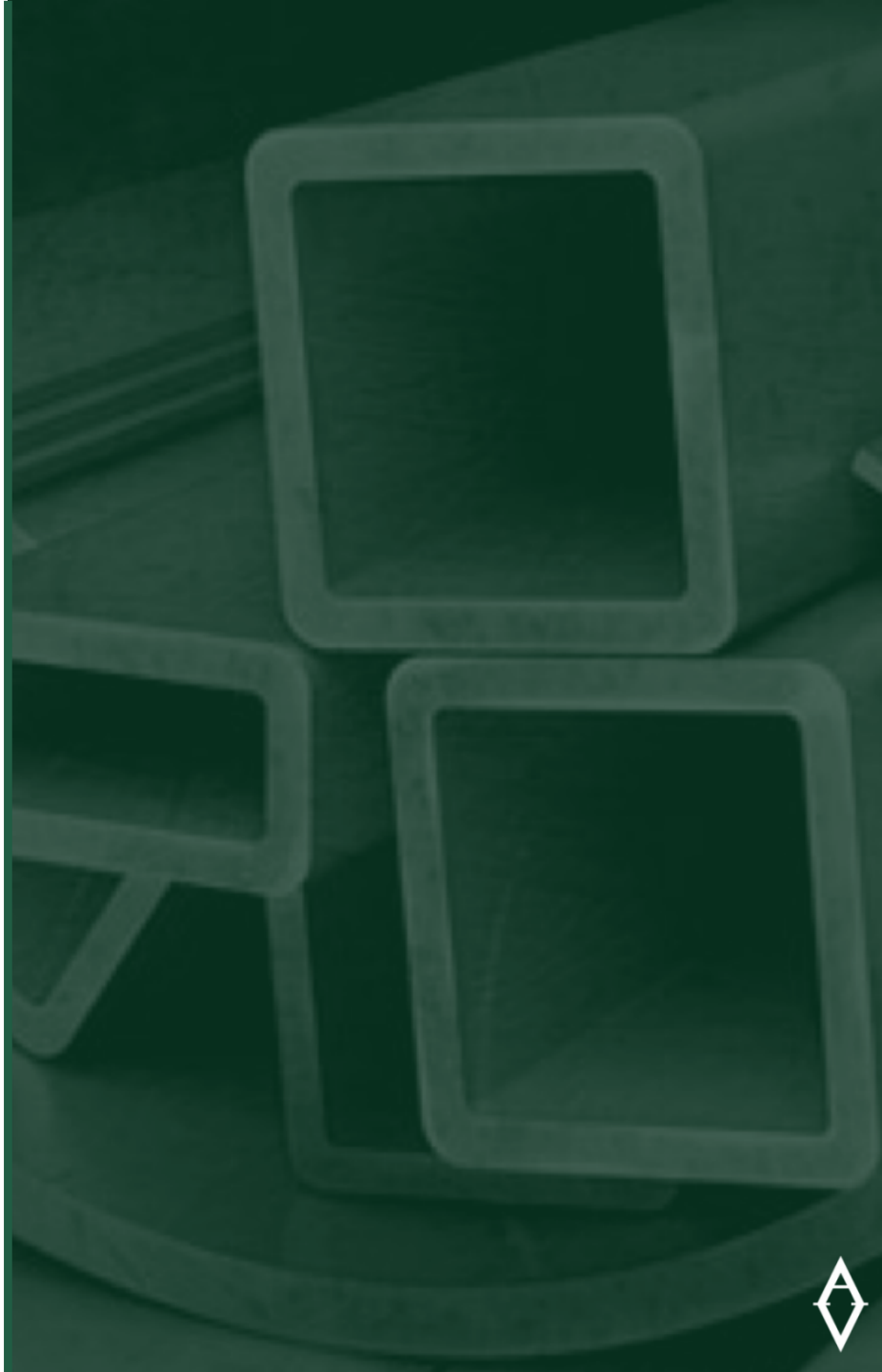
Regions	Mills	EBITDA %				
		2017	2018	2019	2020	LTM
Americas	CLIFFS	25.6	33.3	26.1	10.0	24.4
	GERDAU	10.8	13.4	12.4	17.1	30.9
	NUCOR	12.9	16.6	12.0	12.0	24.5
	USS	8.4	10.4	3.4	-0.7	22.8
APAC	BAOSTEEL BAOSTEEL GROUP CORPORATION	15.2	15.6	11.2	11.6	13.7
	HBIS GROUP 河钢集团 HBIS GROUP	12.1	13.4	12.6	12.9	10.5
	JFE	8.4	11.0	10.1	7.3	13.4
	TATA STEEL	14.0	15.8	19.1	10.8	25.9
Europe	ArcelorMittal	11.7	12.9	6.3	9.8	24.3
	EVRAZ	23.7	29.0	21.2	21.8	28.7
	Severstal	32.4	36.1	33.7	34.3	51.0
	ThyssenKrupp	2.7	4.3	1.0	-12.3	3.2
	voestalpine	13.0	15.2	11.2	9.0	11.3

Regional EBITDA Movement 2017-LTM



Introduction to Applied Value

Background



Steel Sourcing has been a core competency at Applied Value for over 20 years.

Improvements provided by Applied Value

Process Improvements

- Deeper transparency / cost granularity
- Robust tools & templates
- Improved negotiations process
- Reduced risk exposure

Financial Improvements

- Cost savings
- Increased free cash flow
- Reduced gross margin volatility
- Improved payment terms

Why Applied Value?

Savings

Over $440M+ in savings for our clients since 2009, with minimum 3X ROI return on fees (typically 5-10X+)

Expertise

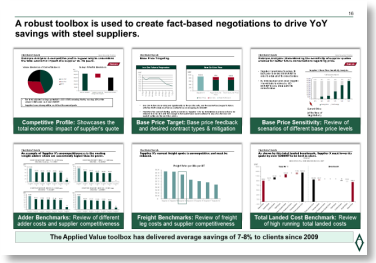
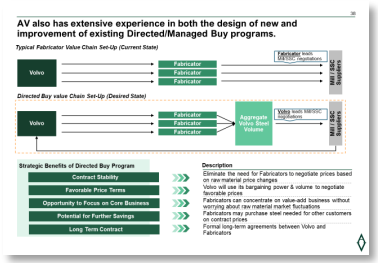
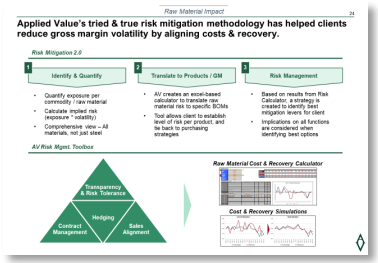
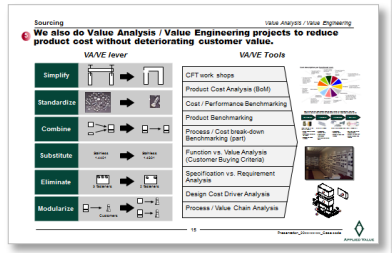
Global experts in raw matl. categories with over 10M MTs negotiated since 2009 & a comprehensive quarterly steel report

Hands-on approach

Work side by side with teams to execute & drive savings to the bottom-line; we typically don't leave until contracts are signed

AV has helped improve 50+ Fortune 500 companies & saved hundreds of millions of dollars for its clients

Applied Value has an excellent track record of handling a wide range of projects within steel sourcing.

	Sample Project Areas			
	Raw Material Tools & Negotiations	**Managed Buy**	**Risk Management**	**VAVE / Technical Savings**
Summary	*Creation of world-class steel tools and execution of negotiations / savings*	*Taking control of steel value chain to generate savings opportunities*	*Tools & strategies to mitigate/track risk and understand effects of commodity volatility*	*Optimization of specs, scrap, etc. to generate & execute on savings ideas*
Typical Timeline	~10-12 weeks	~16 weeks	~6-8 weeks	~10-12 weeks
AV Expertise / Value add	➢ World-class customized tools based on decades of experience across OEMs & Tier 1s	➢ Functional expertise in setting up dozens of programs	➢ Elaborate risk mgmt. toolbox, executed across a variety of industries	➢ Decades of know-how in building elaborate data-driven models & customized templates
Typical Results	➢ **4-8% savings**	➢ **5-10% savings**	➢ **~3% Gross margin volatility reduction**	➢ **Prioritized & quantified opportunities**
				

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